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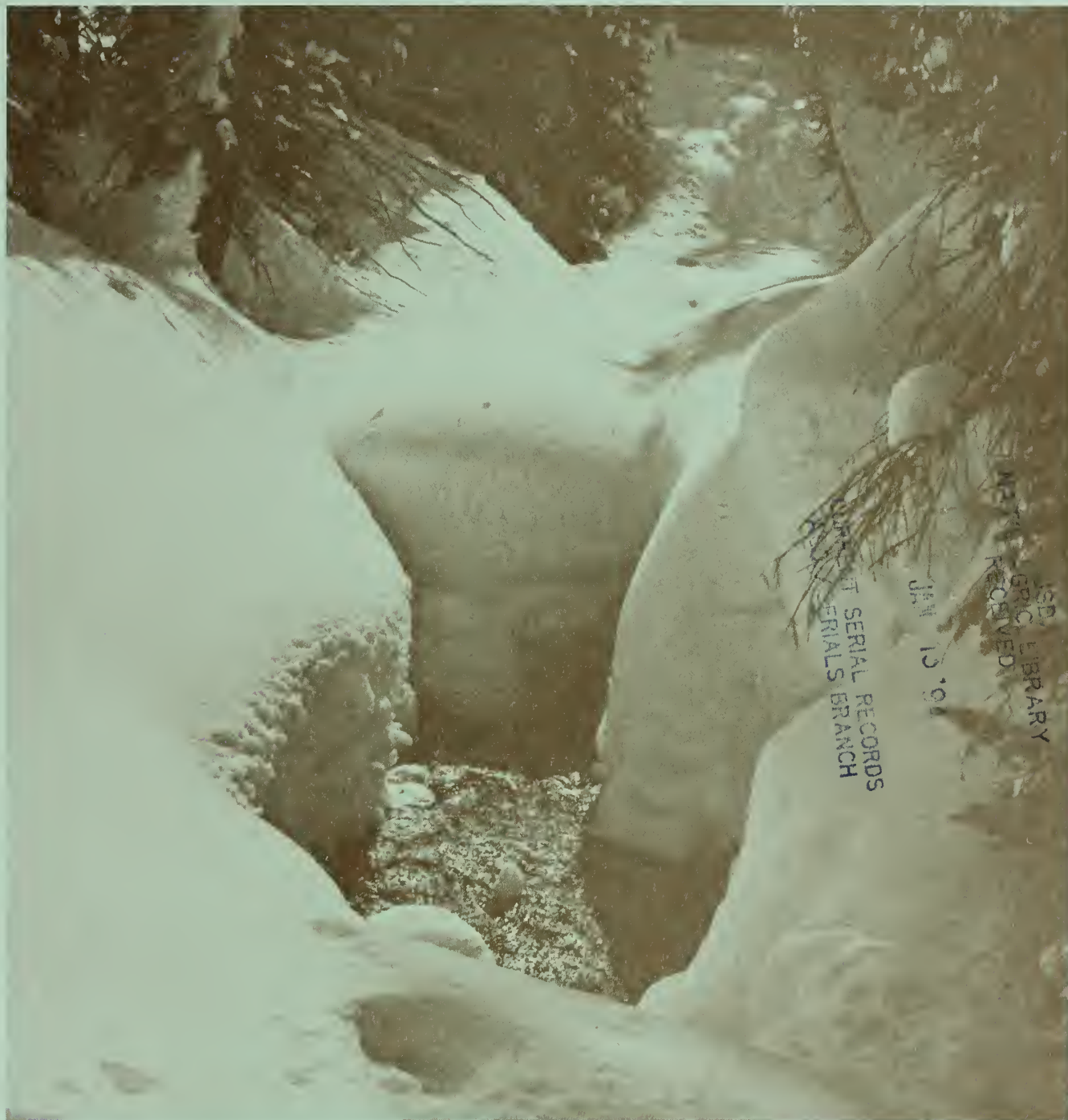
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United States
Department of
Agriculture
Soil
Conservation
Service
Boise
Idaho



WATER SUPPLY OUTLOOK FOR IDAHO

in Cooperation with Idaho State Department of Natural
Resources, Idaho Soil Conservation Districts, and NOAA,
National Weather Service



February 1, 1984

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Up to 75 percent of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data effecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent as surveyed and marked locations in mountain areas. These measurements are repeated in the same location near the same dates each year. Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Snotel (snow telemetry) networks of automatic snow water equivalent and related data sensing devices, are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. A joint Soil Conservation Service and National Weather Service report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs. This report can be obtained from Soil Conservation Service, National Technical Center, Rm. 510, 511 NW Broadway, Portland, Oregon 97209.

In California, the program is coordinated by the California Department of Water Resources. The Canadian provinces of British Columbia and Alberta have comparable programs.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states.

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	2490 W. 26th Ave., Diamond Hill, Bldg. A, Denver, Colorado 80211
Idaho	Room 345, 304 N. 8th St., Boise, Idaho 83702
Montana	Room 443, Federal Building, 10 East Babcock, Bozeman, Montana 59715
Nevada	50 S. Virginia Street, P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	Federal Office Building, 100 East B. Street, Casper, Wyoming 82601

WATER SUPPLY OUTLOOK
FOR
IDAHO
and
Federal-State-Private Cooperative Snow Surveys

Issued by
Peter C. Meyers
Chief
Soil Conservation Service
Washington, D. C.

Released by
Stanley N. Hobson
State Conservationist
Soil Conservation Service
Boise, Idaho

In cooperation with
A. Kenneth Dunn
Director
Idaho Department of Water Resources
Boise, Idaho

and
Soil Conservation Districts
NOAA-National Weather Service
Idaho Power Company
FMC Corporation
Washington Water Power Company

Report prepared by
Snow Survey Staff

Gerald A. Beard
Snow Survey Supervisor
Soil Conservation Service
Boise, Idaho

Soil Conservation Service
Snow Survey Office
Rm. 345, 304 No. 8th Street
Boise, Idaho 83702

WATER SUPPLY OUTLOOK for IDAHO



GENERAL STATEMENT FOR FEBRUARY 1, 1984

Snowpack conditions deteriorated significantly across Idaho during the month of January as a result of well below normal snowfall. Most stations reported increases less than 50 percent of the normal increase while some lower elevation sites reported a net decrease since the first of the month. Basin snowpack conditions which were near to well above normal on January 1 are now near average to below average. The exception is in the extreme southern edge of the State which remains well above normal. Currently, snowpack conditions range from a low of 66 percent of average on the Selway drainage in Northern Idaho to a high of 250 percent of average on the Owyhee drainage in the southwestern corner of the State.

January was dry and cold. Precipitation across southern Idaho was as much as 75 percent below normal. Northern Idaho received more precipitation but was still some 30 percent below normal.

Temperatures were very cold with another arctic outbreak in the middle of January. Record low temperatures were recorded in many areas. Readings were as low as 45 degrees below zero at Fairfield.

Soil profiles in most basins remain wet and soil moisture conditions are above to well above normal throughout the State. Reservoir carryover as of February 1st, remains near average to well above average in most reservoirs, ranging from a low of 82 percent of normal on the Boise River storage system to a high of 176 percent of normal in Lake Owyhee.

April September streamflow forecasts range from 77 percent of average for Pend Oreille Lake inflow in northern Idaho to a high of 215 percent of average for Lake Owyhee net inflow in southeastern Oregon.

Near normal precipitation for the remainder of the season will assure water users in central and southern Idaho of adequate water supplies for 1984 but northern Idaho water users without storage facilities may experience some late summer water deficiencies.

VALLEY PRECIPITATION 1/

Division Averages and Departures
in Inches

	Winter January 1984		Fall - Winter Oct. 1983 - Jan. 1984	
	Observed	Departure <u>2/</u>	Observed	Departure <u>2/</u>
Kootenai, Canada & U.S.	2.36	- 1.12	10.07	- 1.73
Flathead	1.55	- 1.30	6.76	- 2.45
Clark Fork	1.12	- 1.07	5.32	- 1.48
Pend Oreille-Spokane	3.10	- 1.32	14.54	0.0
Upper Snake	.77	- 1.86	11.10	+ 2.96
Snake River Plain	.39	- 0.84	6.74	+ 2.68
Salmon-Payette-Boise	1.33	- 1.97	11.78	+ 2.13
Clearwater	3.36	- 1.38	13.06	- 1.82
Owyhee-Malheur	.51	- .97	7.22	+ 2.51

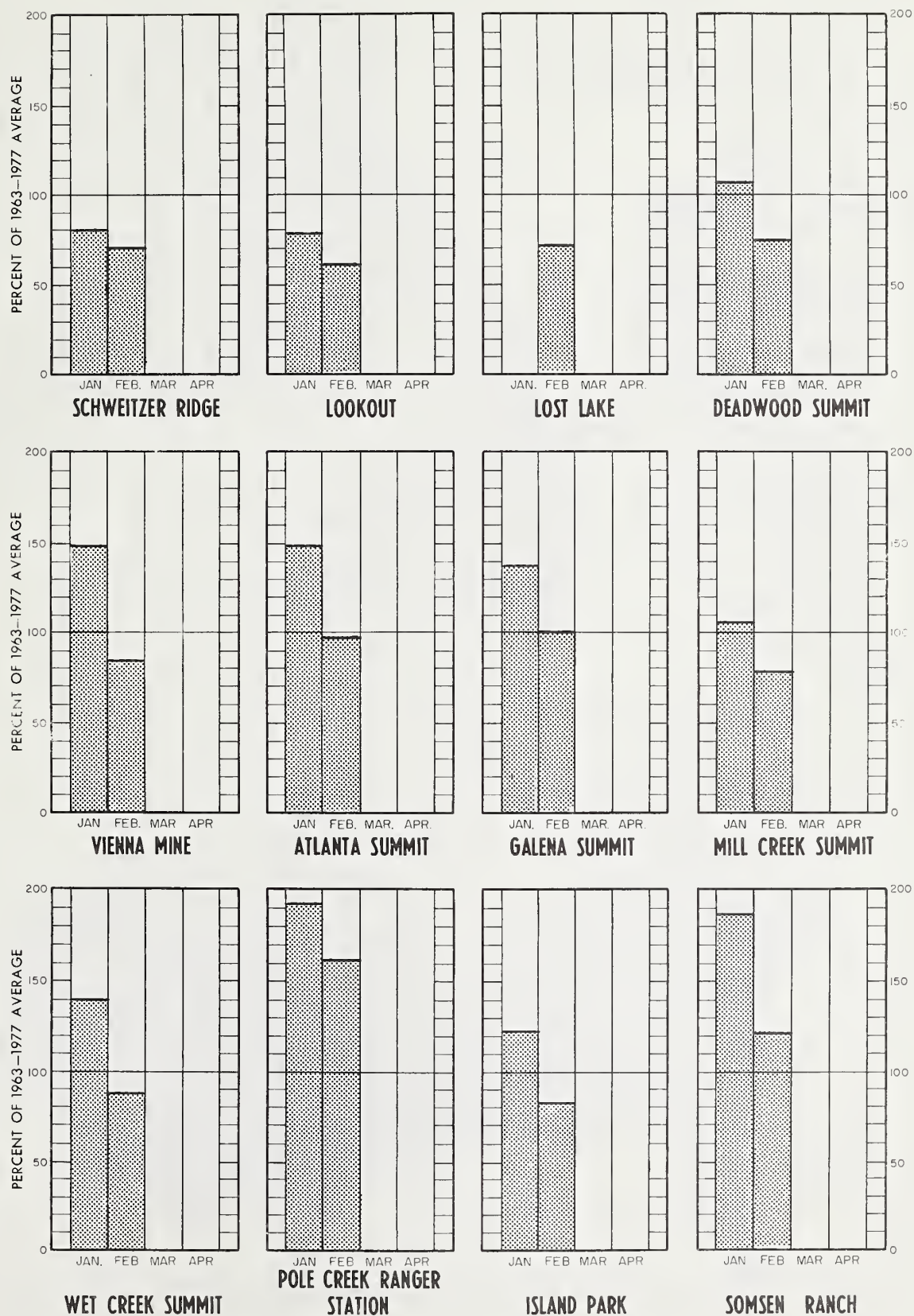
1/Preliminary analysis and data by the National Weather Service and Meteorological Service of Canada.

2/Departure from 15-year (1963-1977) drainage division average.

SNOW WATER DEPTHS ACCUMULATION

For Selected Snow Courses

As Compared To 1961 - 1980 20 Year Average



COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	1961-80 AVERAGE
<u>UPPER COLUMBIA RIVER BASIN</u>			
Kootenai River	41	77	62
Pend Oreille River	117	77	70
Clark Fork River	74	77	68
Clark Fork above Blackfoot, Mt	33	72	62
Blackfoot River, Mt	17	84	67
Flathead River	43	78	73
North Fork Flathead	12	61	64
Middle Fork Flathead	9	79	62
South Fork Flathead	11	85	82
Bitterroot River	11	81	72
Priest River	4 - 5	61	73
Spokane River	7 - 10	74	69
Coeur d'Alene River	4 - 6	66	68
St. Joe River	3 - 4	86	71
<u>LOWER SNAKE RIVER BASIN</u>			
Clearwater River	16	94	72
North Fork Clearwater	11 - 12	93	73
Lochsa	4	95	69
Selway	1	98	66
Salmon River	15 - 16	78	82
Salmon above Salmon	5 - 6	85	88
<u>MIDDLE SNAKE RIVER BASIN - Northside</u>			
Little Lost River	3 - 4	71	87
Big Lost River	4	72	86
Little Wood River	4	66	84
Big Wood River	11 - 12	80	99
Big Wood River above Magic Reservoir	8 - 10	79	91
Camas Creek	2 - 3	87	125
Canyon Creek	1	--	140
Boise River	14 - 16	90	104
Middle Fork Boise	8 - 10	90	97
South Fork Boise	7	84	99
Payette River	13 - 15	77	83
South Fork Payette	5 - 6	80	91
North Fork Payette	8 - 9	74	79
Weiser River	3 - 4	72	79
<u>MIDDLE SNAKE RIVER BASIN - Southside</u>			
Raft River	1	128	155
Goose-Trapper Creeks	1	--	171
Salmon Falls Creek	6 - 7	166	166
Bruneau River	3	193	188
Owyhee River above Owyhee Lake	9 - 10	152	250
<u>UPPER SNAKE RIVER BASIN</u>			
Upper Snake above Palisades Reservoir	21	112	95
Snake above Jackson, Wy	9	90	86
Gros Ventre, Wy	3	102	91
Greys River, Wy	4	114	90
Salt River, Wy	5	129	108
Camas-Beaver Creeks	2	63	85
Henrys Fork River	7	77	86
Teton River	9	102	105
Willow Creek	7	107	128
Blackfoot River	4 - 5	124	126
Portneuf River	4 - 7	137	129
<u>GREAT BASIN</u>			
Bear River (upper)	6	171	124
Montpelier Creek	6	144	120
Mink Creek	1	148	141
Cub River	3	193	159
Malad River	3	--	131

SNOW WATER DEPTHS

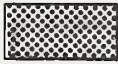



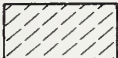
As percent of 1961-80 20 year average

FEBRUARY 1, 1984

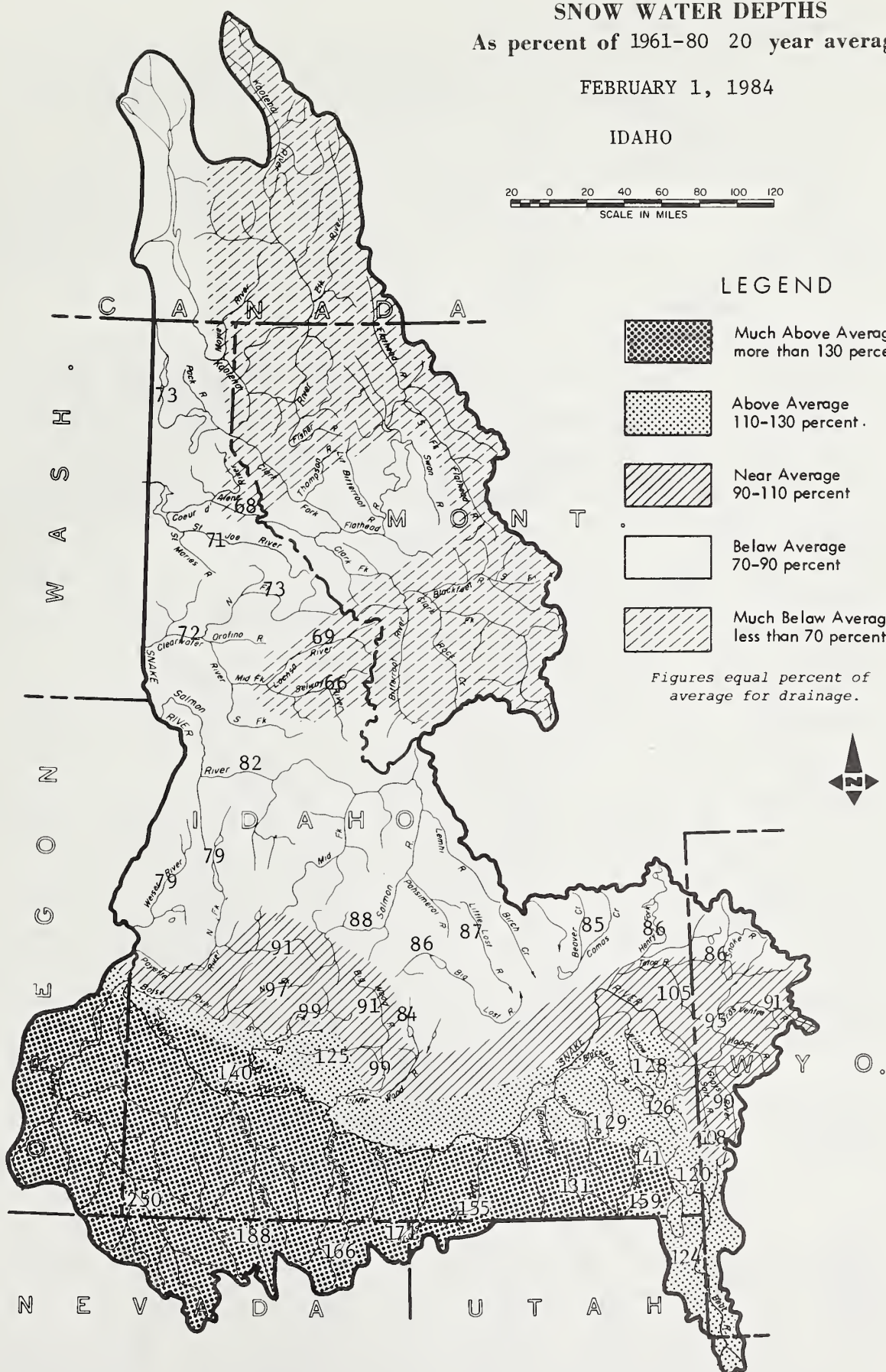
IDAHO

20 0 20 40 60 80 100 120
SCALE IN MILES

LEGEND

-  Much Above Average
more than 130 percent
-  Above Average
110-130 percent
-  Near Average
90-110 percent
-  Below Average
70-90 percent
-  Much Below Average
less than 70 percent

Figures equal percent of
average for drainage.



RESERVOIR STORAGE (1,000 Ac. Ft.)

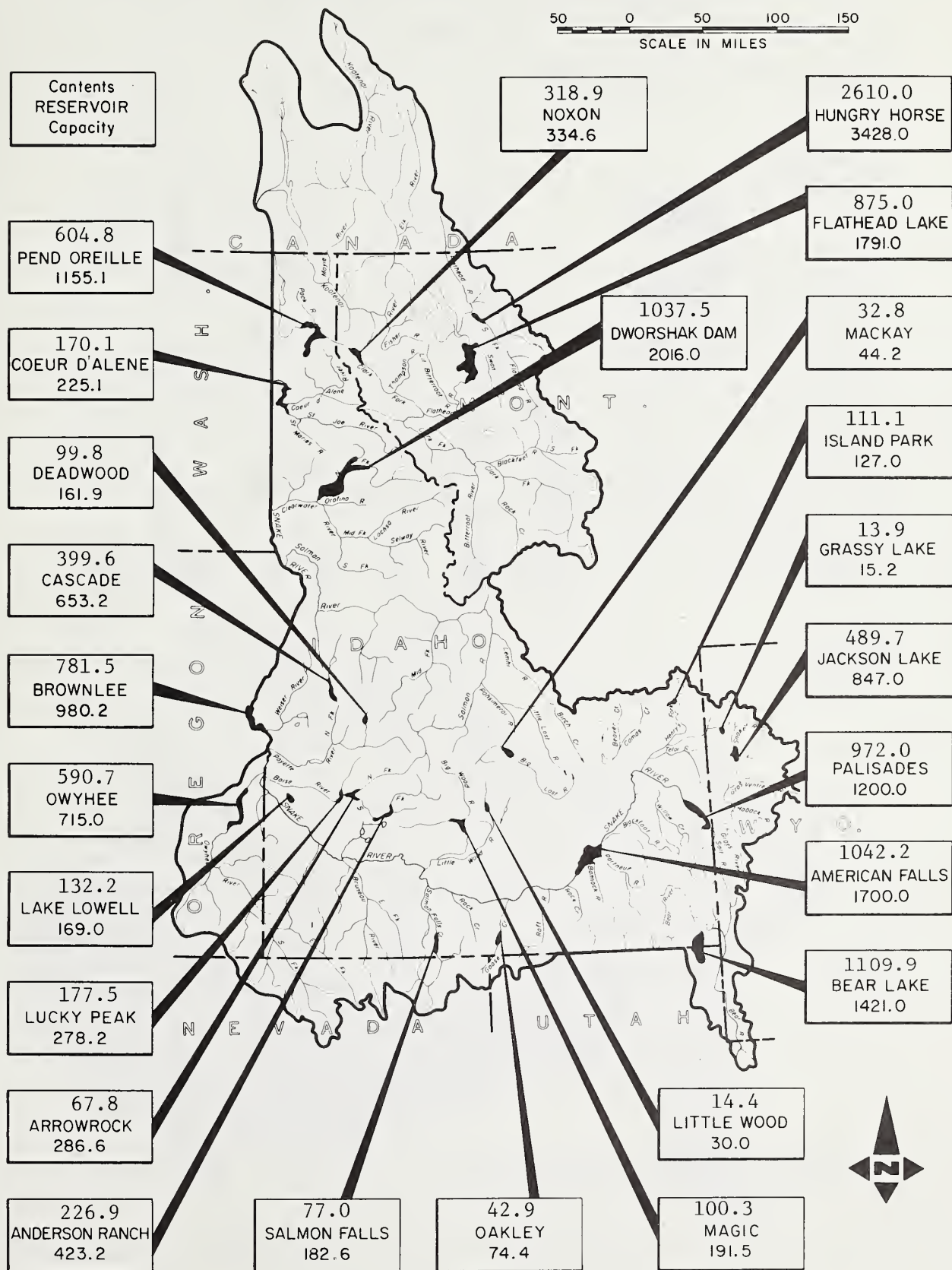
RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1961-80 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2610.0	3062.0	2353.0
Flathead	1791.0	875.0	973.8	1179.0
Pend Oreille	1155.1	604.8	883.7	379.8
Noxon	334.6	318.9	321.1	312.2
Spokane				
Coeur d'Alene	255.1	170.1	155.0	142.4
SNAKE BASIN				
Snake				
Jackson Lake	624.4	489.7	497.8	552.7
Palisades	1200.0	972.0	1092.2	829.9
American Falls	1673.0	1042.2	1225.6	1134.6
Island Park	127.0	111.1	111.1	99.3
Grassy Lake	15.2	13.9	12.3	10.1
Brownlee	980.2	781.5	837.8	659.9
Goose-Trapper Creeks				
Oakley	74.4	42.9	27.6	25.6
Salmon Falls Creek				
Salmon Falls	182.6	77.0	42.5	45.2
Big Lost				
Mackay	44.2	32.8	36.8	29.2
Big Wood				
Magic	191.5	100.3	164.0	86.7
Little Wood				
Little Wood	30.0	14.4	20.5	14.7
Fish Creek				
Carey Valley	14.4	9.0	8.7	--
Boise				
Anderson Ranch	423.2	226.9	326.6	253.0
Arrowrock	286.6	67.8	92.5	241.4
Lucky Peak	278.2	177.5	193.4	77.0
Lake Lowell (Deer Flat)	169.0	132.2	130.6	114.7
Owyhee				
Owyhee	715.0	590.7	618.6	336.1
Payette				
Cascade	653.2	399.6	377.6	343.9
Deadwood	161.9	99.8	98.7	74.5
Weiser				
Mann Creek	11.1	3.8	7.6	--
Clearwater				
Dworshak	2016.0	1037.5	963.8	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	1109.9	1140.6	970.6
Montpelier Creek	4.05	2.22	2.40	--
*Period of Record.				

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

FEBRUARY 1, 1984

50 0 50 100 150
SCALE IN MILES



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST ^c		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average [†]

UPPER COLUMBIA BASIN

KOOTENAI RIVER

Leonia	(at)	7180	83	Apr-Sep	--	8602
		6260	83	Apr-Jul	--	7498
		5020	83	Apr-Jun	--	6051

PEND OREILLE RIVER

Clark Fork River

Whitehorse Rapids	(at)	10200	75	Apr-Sep	--	13575
		9280	75	Apr-Jul	--	12351
		7930	75	Apr-Jun	--	10570

Pend Oreille Lake Inflow

		11700	77	Apr-Sep	--	15150
		10800	78	Apr-Jul	--	13870

Priest River

Priest River 1/	(at)	859	97	Apr-Sep	--	885
		808	97	Apr-Jul	--	832

SPOKANE RIVER

Post Falls 2/	(at)	2340	82	Apr-Sep	--	2860
		2260	82	Apr-Jul	--	2756

St. Joe River

Calder	(at)	1040	80	Apr-Sep	--	1294
		992	81	Apr-Jul	--	1225

SNAKE RIVER BASIN

SNAKE RIVER - MAIN STEM

Moran 3/	(at)	820	93	Apr-Sep	--	879
Palisades Inflow 3/		3470	91	Apr-Sep	--	3793
Heise 4/	(nr)	3780	93	Apr-Sep	--	4066
		3227	93	Apr-Jul	--	3465
Blackfoot 5/	(nr)	5030	93	Apr-Sep	--	5430
		4120	93	Apr-Jul	--	4429

Henry's Fork

Ashton 6/	(nr)	645	90	Apr-Sep	--	714
		474	90	Apr-Jul	--	529

Rexburg 7/

	(nr)	1340	91	Apr-Sep	--	1475
		1050	91	Apr-Jul	--	1153

Falls River

Squirrel	(nr)	351	96	Apr-Jul	--	366
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Teton

South Leigh Creek	(ab)	198	102	Apr-Sep	--	194
		148	102	Apr-Jul	--	145

St. Anthony

	(nr)	470	101	Apr-Sep	--	465
		380	101	Apr-Jul	--	375

Portneuf River

Topaz	(at)	163	160	Mar-Sep	--	102.6
		131	160	Mar-Jul	--	82.2

Oakley Reservoir

Inflow		59.4	164	Mar-Sep	--	35.4
		53	164	Mar-Jul	--	32.4
		49.5	164	Apr-Sep	--	30.2
		44.5	164	Apr-Jul	--	27.2





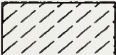
(c) Assuming normal meteorological conditions.

+ 1961-80 period.

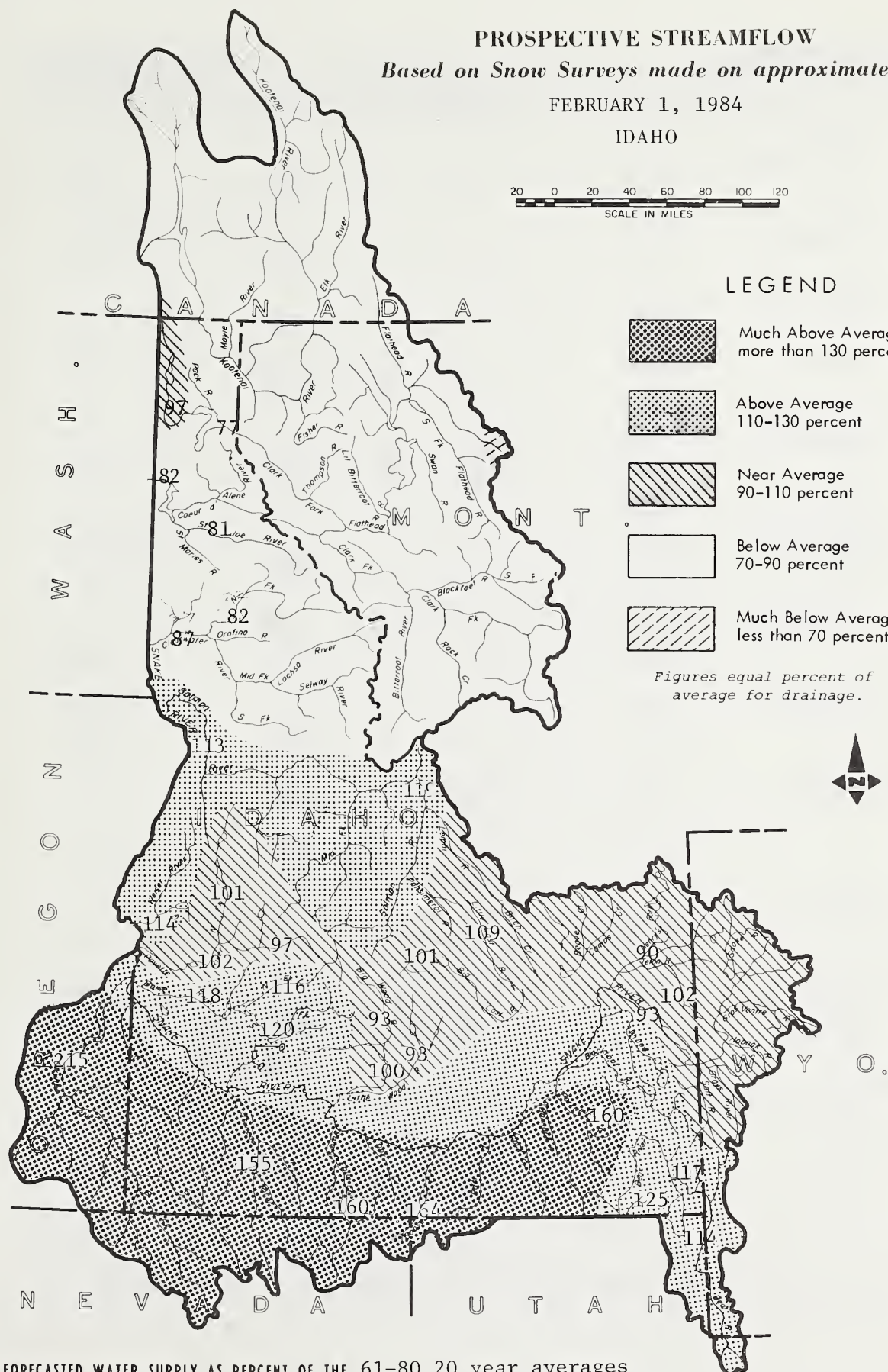
PROSPECTIVE STREAMFLOW
Based on Snow Surveys made on approximately
FEBRUARY 1, 1984
IDAHO

20 0 20 40 60 80 100 120
 SCALE IN MILES

LEGEND

-  Much Above Average
more than 130 percent
-  Above Average
110-130 percent
-  Near Average
90-110 percent
-  Below Average
70-90 percent
-  Much Below Average
less than 70 percent

*Figures equal percent of
average for drainage.*



FORECASTED WATER SUPPLY AS PERCENT OF THE 61-80 20 year averages

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT			THIS YEAR		PAST RECORD	
			FORECAST ^c		THOUSAND ACRE FEET	
			Thousand Acre Feet	Percent of Average	PERIOD	Last Year Average [†]
<u>Salmon Falls Creek</u>						
San Jacinto	(nr)		150	160	Mar-Sep	-- 94
			143	160	Mar-Jul	-- 89.3
			135	160	Mar-Jun	-- 84.4
<u>Bruneau River</u>						
Hot Springs	(nr)		376	155	Mar-Sep	-- 243
			360	155	Mar-Jul	-- 232
<u>Little Lost River</u>						
Howe	(nr)		46	109	Apr-Sep	-- 42.2
			35.5	109	Apr-Jul	-- 32.6
Wet Creek	(bl)		42	108	Apr-Sep	-- 38.8
			34	108	Apr-Jul	-- 31.4
			27	108	Apr-Jun	-- 25
<u>Big Lost River</u>						
Howell Ranch	(at)		213	101	Apr-Sep	-- 211
			188	101	Apr-Jul	-- 186
			145	101	Apr-Jun	-- 144
Mackay 8/	(nr)		186	101	Apr-Sep	-- 184
<u>Big Wood River</u>						
Bellevue	(nr)		180	93	Apr-Sep	-- 193
			167	93	Apr-Jul	-- 180
Magic Reservoir						
Inflow 9/			295	100	Apr-Sep	-- 295
			285	100	Apr-Jul	-- 280
			307	100	Mar-Jul	-- 306
<u>Little Wood River</u>						
Carey 10/	(nr)		94	93	Apr-Sep	-- 101
			87	94	Apr-Jul	-- 93.1
			77.5	94	Apr-Jun	-- 82.5
<u>Boise River</u>						
Twin Springs	(nr)		818	116	Apr-Sep	-- 705
			755	116	Apr-Jul	-- 650
Boise 11/	(nr)		1854	118	Apr-Sep	-- 1571
			1710	118	Apr-Jul	-- 1454
			1509	118	Apr-Jun	-- 1279
<u>South Fork</u>						
Anderson Dam 12/	(at)		707	120	Apr-Sep	-- 590
			661	120	Apr-Jul	-- 551
<u>Owyhee River</u>						
Gold Cr., Nv 13/	(nr)		50	155	Apr-Jul	-- 32.4
Owyhee, Nv 13/			180	225	Apr-Jul	-- 80
Lake Owyhee			809	215	Apr-Sep	-- 376
net inflow 14/			1193	213	Feb-Jul	-- 561
Rome	(at)		1274	213	Feb-Jul	-- 598
<u>Payette River</u>						
Horseshoe Bend 15/	(nr)		1835	102	Apr-Sep	-- 1805
			1695	102	Apr-Jul	-- 1668
<u>North Fork</u>						
Cascade 16/	(at)		558	101	Apr-Sep	-- 553
			523	101	Apr-Jul	-- 518
Banks 16/	(nr)		720	101	Apr-Sep	-- 712
			678	101	Apr-Jul	-- 671

(c) Assuming normal meteorological conditions.

† 1961-80 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR			PAST RECORD	
		FORECAST ^c		FORECAST PERIOD	THOUSAND ACRE FEET	
		Thousand Acre Feet	Percent of Average		Last Year	Average [†]
<u>South Fork</u>						
Lowman	(at)	482	97	Apr-Sep	--	497
		429	97	Apr-Jul	--	441
<u>Deadwood Reservoir</u>						
Inflow		140	100	Apr-Jul	--	140
<u>Weiser River</u>						
Weiser	(nr)	618	114	Mar-Sep	--	543
		486	114	Apr-Sep	--	427
		454	114	Apr-Jul	--	399
<u>Salmon River</u>						
Whitebird	(at)	7790	113	Apr-Sep	--	6876
		7040	113	Apr-Jul	--	6211
Salmon	(nr)	1250	119	Apr-Sep	--	1053
		1060	118	Apr-Jul	--	899
<u>Clearwater River</u>						
Spalding	(at)	7390	87	Apr-Sep	--	8460
		6980	87	Apr-Jul	--	8000
<u>North Fork Clearwater</u>						
Dworshak Reservoir						
Inflow		2440	82	Apr-Sep	--	2985
		2300	82	Apr-Jul	--	2805
GREAT BASIN						
<u>BEAR RIVER</u>						
Harer	(at)	450	145	Apr-Sep	688	310
<u>Montpelier Creek</u>						
Montpelier	(nr)	16.3	117	Apr-Sep	--	13.9
<u>Cub River</u>						
Preston	(nr)	64.5	125	Apr-Sep	--	51.8
		58.4	125	Apr-Jul	--	46.8

1/ Observed flow corrected for storage in Priest Lake.

2/ Observed flow corrected for storage in Coeur d'Alene Lake

3/ Corrected for storage in Jackson Lake.

4/ Corrected for storage in Jackson Lake and Palisades.

5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henrys Lake, Grassy Lake and diversions between Heise and Blackfoot.

6/ Corrected for storage in Henrys Lake and Island Park Reservoir.

7/ Corrected for storage in Henrys Lake and Island Park, Grassy Lake and diversions between Ashton and Rexburg.

8/ Observed flow corrected for storage in Mackay Reservoir.

9/ Combined flow Big Wood River nr. Bellevue and Camas Creek near Blaine.

10/ Corrected for storage in Little Wood Reservoir.

11/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.

12/ Corrected for storage in Anderson Ranch Reservoir.

13/ Corrected for storage in Wildhorse Reservoir.

14/ From Bureau of Reclamation records of inflow.

15/ Corrected for storage in Cascade and Deadwood Reservoirs.

16/ Corrected for storage in Cascade Reservoir.

Cooperative forecasts released by Soil Conservation Service and National Weather Service.

(c) Assuming normal meteorological conditions.

[†]1961-80 period.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
						Last Year	b Average
NAME & DRAINAGE		Elevation					
Above Burke		Coeur d'Alene	4100	1/30	30	9.0	12.5
Afton Ranger Sta.	(Wy)	Salt River	6240	1/31	22	4.5	2.6
Allen Ranch		Blackfoot	6470	2/1	35	9.8	7.2
Arizona	(Wy)	Snake	6820	1/30	42	11.8	14.1
Aster Creek	(Wy)	Snake	7750	1/30	49	15.5	18.5
Atlanta Summit		Boise	7600	1/26	71	23.6	29.4
Atlanta Townsite		Boise	5370	1/26	42	11.4	11.2
Austin Bros. Ranch		Blackfoot	6400	2/1	31	8.5	6.6
Bad Bear		Boise	4940	1/30	41	12.4	10.6
Banner Summit		Payette	7040	2/1		18.9e	22.7
Base Camp	(Wy)	Snake	7030	1/31	38	11.0	12.4
Bear Basin		Little Salmon	5350	2/1		11.6e	16.9
Bear Canyon		Big Lost	7900	2/1		10.1e	13.8
Beaverdam Creek		Portneuf	6120	1/28	28	8.6	5.5
Bennett Mountain		Canyon Creek	6560	2/1		19.9e	--
Benton Meadow		Priest	2370	1/27	19	4.8	4.9
Benton Spring		Priest	4920	1/27	34	9.5	16.2
Big Creek Summit		Salmon	6580	1/27	69	21.6	27.1
Big Springs		Henrys Fork	6400	2/1	38	11.1	14.9
Birch Creek		Willow	6800	1/30	29	9.1	7.3
Black Rock	(Wy)	Snake	8900	1/31	50	15.0	14.3
Blind Bull	(Wy)	Creys	8650	1/31	50	16.0	13.0
Blue Ridge		Blackfoot	6780	1/30	47	16.3	14.8
Bogus Basin		Payette	6340	1/30	59	20.3	22.0
Bogus Basin Road		Boise	5540	1/30	33	10.4	8.7
Bone		Willow	6200	1/30	23	5.6	5.3
Bostetter Ranger Sta.		Trapper	7500	2/1		22.6e	--
Boulder Creek		Weiser	5440	1/31	49	14.4	17.9
Breezy Saddle		Clearwater	5010	1/30	46	12.5	17.0
Brockman Station		Willow	6430	1/30	31	9.0	7.3
Brundage Mountain		Little Salmon	7560	2/1		25.0e	28.8
Bruno Creek		Salmon	7920	2/1	39	11.5	--
Bryan Flat	(Wy)	Hoback	6420	1/26	26	6.3	4.1
Camp Creek		Beaver	6580	1/30	24	4.8	10.2
Cayuse Airstrip		Clearwater	3500	1/30	25	6.5	4.6
CCC Camp	(Wy)	Salt	7000	1/30	37	9.6	6.6
Chimney Creek		Big Wood	6400	1/28	43	14.3	--
Columbia Basin (A)	(Nv)	Owyhee	6650	1/26	54	18.4	8.6
Copper Basin		Big Lost	7640	2/1		5.7e	8.5
Cottonwood Lake (A)	(Wy)	Creys	7600	1/31	44	12.3	14.3
Couch Summit		Boise	6840	1/28	49	14.3	16.4
Coulter Creek	(Wy)	Snake	7020	1/30	46	13.8	14.0
Cozy Cove		Deadwood	5380	1/26	43	11.6	13.0
Crater Meadows		Clearwater	5960	1/30	68	22.7	21.8
Crawford Ranger Sta.		Payette	4860	1/29	22	5.7	6.9
Crooked Fork		Lochsa	3610	1/31	28	8.0	8.0
Cub River Ranger Sta.		Cub	5450	1/27	40	11.7	5.1
Darby Canyon	(Wy)	Teton	8250	1/30	53	17.3	15.6
Deadline		Salmon Falls	7400	1/30	63	26.3	16.7
Deadline South		Salmon Falls	7450	1/30	71	28.0	20.4
Deadman Culch		Boise	5600	1/30		15.0e	--
Deadwood Airstrip		Deadwood	5360	2/1		12.3e	13.7
Deadwood Summit		Deadwood	6860	1/26	75	24.1	35.8
Dollarhide Summit		Big Wood	8420	1/26	55	17.6	22.3
Dry Creek Flat		Malad	6360	1/24	38	10.5	--
East Creek		Portneuf	7000	1/28	38	12.4	8.2
East Rim Divide	(Wy)	Hoback	7930	1/30	28	7.2	5.6
Elk Butte		Clearwater	5550	1/30	63	18.7	17.0
Emigrant Summit		Bear	7390	2/1		24.0e	16.2
Fawn Creek (A)	(Nv)	Owyhee	7000	1/26	58	19.7	14.6
Fish Lake Airstrip		Lochsa	5650	1/30	59	17.9	18.3
Four Mile Meadows	(Wy)	Snake	7860	1/31	32	8.1	7.5
Forty-nine Meadows		Clearwater	4830	1/30	46	13.2	15.4
Fourth of July Smt.		Coeur d'Alene	3200	1/27	24	6.9	7.0
Franklin Basin		Cub	8040	1/27	62	22.9	13.7
Freds Mountain	(Wy)	Teton	8150	1/30	62e	18.5e	17.0
Fry Canyon	(Nv)	Owyhee	6700	1/31	34	12.0	7.7
Galena		Big Wood	7440	1/31	41	11.3	16.0
Galena Snotel		Big Wood	7470	1/31	45	13.4	16.8
Calena Summit		Big Wood	8780	1/31	51	16.5	17.6
Garfield Ranger Sta.		Little Wood	6560	1/28	26	6.3	9.9
Gibbons Pass	(Mt)	Bitterroot	7100	1/30	48	13.4	17.9
Giveout		Montpelier	6860	1/31	36	10.6	7.1

(A) Aerial observation, water content estimated.

(b) 1961-1980, 20 year period.

(e) Snow course data estimated from automated Snotel readings.

(*) Estimated 1961-1980 20 year average.

SNOW

DRAINAGE BASIN and or SNOW COURSE				THIS YEAR			PAST RECORD	
				Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
							Last Year	b Average
NAME & DRAINAGE			Elevation					
Glade Creek	(Wy)	Snake	7040	1/30	49	15.4	16.1	15.9
Goat Creek	(Nv)	Salmon Falls	8880	1/30	59	20.6	10.9	11.4*
Graham Guard Sta.		Boise	5690	1/26	46	13.1	13.1	11.7*
Graham Ranch		Big Wood	6270	1/31	35	10.1	12.8	9.9
Grassy Lake	(Wy)	Henrys Fork	7265	1/30	67	22.0	22.9	24.2
Greys Boundary	(Wy)		5720	1/31	36	10.2	7.0	8.1
Gros Ventre Summit	(Wy)	Gros Ventre	8750	1/31	33	8.0	8.0	8.5
Grover Park Divide	(Wy)	Salt	7000	1/31	35	10.4	6.0	8.6
Heart Lake Trail	(Mt)	Clark Fork	4800	1/31	33	10.6	12.5	15.7
Hemlock Butte		Clearwater	5810	1/30	76	23.8	22.7	33.8*
Hilts Creek		Little Lost	8000	1/31	28	6.6	9.2	--
Hoodoo Basin	(Mt)	Clark Fork	6000	1/31	78	26.2	33.7	34.8
Hoodoo Creek	(Mt)	Clark Fork	5900	1/31	74	24.6	31.2	32.4
Howell Canyon		Marsh Creek	7980	2/1		27.7e	21.7	17.9
Huckleberry Divide	(Wy)	Snake	7300	1/30	45	13.0	14.3	15.0
Humboldt Gulch		Coeur d'Alene	4250	1/30	22	6.6	10.0	--
Hyndman Creek		Big Wood	7440	2/1		7.7e	11.5	--
Idaho City Townsite		Boise	4000	1/30	27	8.0	5.5	--
Indian Meadows		Teton	8240	1/30	76	28.3	30.6	24.5*
Island Park		Henrys Fork	6290	2/1	35	9.7	13.9	11.7
Jackpine Creek	(Wy)	Teton	7350	1/30	47	14.7	15.9	15.2
Jackson Peak		Boise	7070	1/26	60	18.5	25.2	22.9*
Kilgore		Camas Creek	6320	1/30	30	8.5	10.9	8.2
Lake Fork		Payette	5290	1/28	45	11.2	11.3	12.2*
Lakeview Canyon	(Mt)	Beaverhead	6930	1/27	24	6.2	11.8	8.5
Lakeview Ridge	(Mt)	Beaverhead	7400	1/27	24	5.5	10.4	7.6
Langford Flat Creek		Salmon Falls	5980	1/30	34	11.0	5.1	--
Laurel Draw	(Nv)	Owyhee	6700	2/1	43e	14.5e	7.1	5.7
Lava Creek		Willow	7350	1/30	43	13.8	12.4	9.9*
Lewis Lake Divide	(Wy)	Snake	7850	1/30	69	23.8	26.6	28.4
Little Beaver		Montpelier	6970	1/31	43	13.2	8.7	10.5*
Lolo Pass		Lochsa	5240	1/31	47	14.1	15.3	21.5*
Lookout		Coeur d'Alene	5140	1/30	46	15.0	22.0	24.6
Lost Lake		Clearwater	6110	1/30	84	26.8	32.2	38.0*
Lost Wood Divide		Big Lost	7900	2/1		12.3e	17.4	16.1*
Lower Elkhorn		Portneuf	6960	1/25	41	13.0	--	10.6*
Lower Home Canyon		Montpelier	7640	1/30	38	12.2	7.2	10.4*
Lower Pebble		Portneuf	5780	1/28	36	11.0	7.1	9.2*
Magic Mountain		Rock Creek	6880	1/30	67	24.6	14.0	12.8
Mascot Mine		Big Wood	7780	2/1		7.7e	11.0	9.1*
McRenolds Reservoir		Teton	6720	1/30	44	12.7	13.7	13.2*
Merritt Mountain	(Nv)	Owyhee	7000	1/26	36	12.2	4.7	4.2
Mill Creek Summit		Salmon	8800	2/1	43	12.7	16.9	16.3*
Mink Creek		Portneuf	6410	1/29	50	18.2	13.1	12.0
Montpelier Creek		Montpelier	6540	2/1		6.2e	5.3	5.8*
Moonshine		Little Lost	7440	1/30	28	6.6	7.6	7.5*
Moore Creek Summit		Boise	6100	1/30	70	24.0	27.4	22.6
Moose Creek		N.F. Salmon	6200	1/27	47	11.2	13.0	12.2
Moran	(Wy)	Snake	6750	1/31	33	8.9	7.4	5.4
Morgan Creek		Salmon	7600	2/1		8.9e	10.0	9.9*
Mosquito Ridge		Coeur d'Alene	5200	2/1	56	18.2	30.4	25.8*
Mount Baldy		Big Wood	8920	1/29	47	14.1	18.2	14.4
Mud Creek		Willow	7100	1/30	49	16.8	15.6	11.2*
Muldoon		Little Wood	6320	1/28	15	3.6	8.0	5.8*
North Putnam		Ross Fork	7240	2/1	56	20.0	--	--
Oxford Spring		Malad	6740	1/24	45	12.8	--	--
Packsaddle Spring		Teton	8200	1/30	55	20.0	21.5	--
Pebble Creek		Portneuf	6550	1/28	40	13.0	11.2	11.6
Phillips Bench	(Wy)	Teton	8200	1/26	59	17.7	17.8	19.6
Pierce Ranger Sta.		Clearwater	3080	1/27	26	7.4	3.6	8.5
Pine Creek Pass		Teton	6810	2/1	41	12.3	11.0	11.7
Poison Meadows	(Wy)	Greys	8500	1/31	61	19.2	17.8	20.9
Pole Creek Rgr. Sta.	(Wy)	Jarbridge	8360	1/30	59	21.9	12.8	13.5*
Prairie		Boise	4800	1/29	27	6.7	5.4	4.9
Road Creek		Boise	5380	1/26	35	10.2	7.6	7.7
Rock Flat Summit		Payette	5310	1/29	45	11.0	15.9	12.8
Rodeo Flat	(Nv)	Owyhee	6800	1/31	39	13.0	8.4	4.1
Saddle Mountain	(Mt)	Bitterroot	7940	1/30	52	14.4	18.0	17.9
Salt River Summit	(Wy)	Salt	7700	1/30	42	11.4	7.8	11.3
Savage Pass		Lochsa	6170	1/31	47	13.8	14.9	18.9*
Sawmill Canyon		Little Lost	7000	1/30	24	5.2	6.6	6.0*
Sawtell Mountain		Henrys Fork	8720	2/1	62	22.0	30.1	23.0*

(A) Aerial observation, water content estimated.

(b) 1961-1980, 20 year period.

(c) Snow course data estimated from automated Snotel readings.

(*) Estimated 1961-1980 20 year average.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME & DRAINAGE		Elevation	Date of Survey	Snow Depth (inches)	Water Content (Inches)	Water Content (inches)	
						Last Year	b Average
Schweitzer Basin	Pend Oreille	6090	2/1		25.7e	39.8	--
Schweitzer Bowl	Pend Oreille	4800	2/1		15.8e	28.0	21.6*
Schweitzer Ridge	Pend Oreille	6200	2/1		23.1e	40.0	32.9*
Secesh Summit	Payette	6520	1/28	60	19.2	28.3	25.4*
Sedgwick Peak	Portneuf	7850	1/28	46	16.0	12.5	--
Shanghai Summit	Clearwater	4570	1/30	43	12.7	12.3	17.3*
Sheep Mountain	Willow	6570	1/30	30	8.8	11.3	9.3*
Sherwin	St. Maries	3200	2/1		8.3e	6.5	10.5*
Shoshone Basin	Salmon Falls	5810	1/30	31	9.5	5.8	4.6*
Slug Creek Divide	Blackfoot	7230	1/30	42	13.4	9.7	11.6*
Snake River Sta. (Wy)	Snake	6920	1/30	43	13.0	13.9	14.6
Soldier Ranger Sta.	Big Wood	5740	1/28	37	11.9	13.6	9.3
Somsen Ranch	Willow Creek	6840	2/1	41	12.3	10.4	10.2
South Mountain	Jordan-Owyhee	6500	1/29	51	17.0	15.4	9.4
Squaw Flat	Weiser	6240	1/29	46	13.0	20.4	18.8
Squaw Meadow	Payette	5900	1/28	58	18.0	28.1	24.6*
State Line	Teton	6660	2/1	37	10.7	9.8	10.0
Stickney Mill	Big Lost	7430	2/1		6.4e	8.0	5.8*
Sunset	Coeur d'Alene	5540	1/31	42	13.2	21.8	--
Swede Peak	Little Wood	7640	1/28	36	11.3	15.8	11.9
Targhee Pass	Henry's Fork	6980	2/1	29e	7.8e	10.1	10.5*
Taylor Canyon (Nv)	Owyhee	6200	1/31	32	12.1	6.7	4.0
Teton Pass W.S. (Wy)	Teton	7740	1/27	59	19.1	17.0	17.7
Toe Jam (A) (Nv)	Owyhee	7700	1/26	48	16.3	10.1	6.7
Thumb Divide (Wy)	Snake	7980	1/30	35	9.6	12.2	14.6
Togwotee Pass (Wy)	Snake	9580	1/31	58	18.8	18.1	20.2
Toponce	Portneuf	6160	2/1	40	14.5	--	--
Trinity Mountain	Boise	7770	1/26	76	26.3	32.5	29.7
Turpin Meadows (Wy)	Snake	6900	1/31	26	6.8	6.3	8.0
Twitchell Canyon	Blackfoot	6300	2/1	39	13.3	--	--
Upper Elkhorn	Portneuf	7140	1/25	48	15.3	--	12.8*
Upper Home Canyon	Montpelier	8560	1/30	57	20.3	14.1	16.3*
Upper Jack Creek (Nv)	Owyhee	7250	2/1	66	21.7	19.8	--
Valley View	Henry's Fork	6680	2/1	32	8.6	13.9	11.7
Vienna Mine	Salmon	8960	1/26	74	21.8	26.2	25.5*
West Branch	Weiser	5560	1/31	52	14.8	19.6	--
Wet Creek Summit	Little Lost	7680	1/31	27	6.8	12.3	7.8*
Whiskey Flat	Montpelier	6960	2/1		7.3e	6.0	6.7*
White Elephant	Henry's Fork	7710	2/1	45	14.4	18.8	16.0*
Wildhorse Divide	Portneuf	6490	1/29	51	17.2	13.0	--
Willow Flat	Cub	6070	1/27	59	19.8	9.0	11.1
Youngs Ranch (Wy)	Greys	6650	1/31	33	9.6	10.3	12.6

(A) Aerial observation, water content estimated.

(b) 1961-1980, 20 year period.

(e) Snow course data estimated from automated Snotel readings.

(*) Estimated 1961-1980 20 year average.

SNOTEL^{1/}

Data Site Name	Drainage	Date	Pillow Snow Water Equivalent (inches)	Precipitation Water Year (Accumulation) (inches)
Atlanta Summit	Boise	2/1	21.1	26.6
Banner Summit	Payette	2/1	16.7	22.5
Base Camp	Upper Snake	2/1	10.3	15.8
Bear Basin	Little Salmon	2/1	11.1	17.1
Bear Canyon	Big Lost	2/1	8.8	13.1
Bear Creek	Jarbridge	2/1	22.7	23.9
Bear Mountain	Clark Fork	2/1	23.2	39.1
Bear Saddle	Mann Creek	2/1	17.2	18.3
Bennett Mountain	Canyon Creek	2/1	22.0	21.3
Big Creek Summit	Salmon	2/1	18.3	25.5
Big Sandy Opening	Green	2/1	NA	8.6
Blind Bull Summit	Green	2/1	16.8	16.9
Bostetter Ranger Sta.	Trapper	2/1	NA	18.8
Bunchgrass Meadow	Pend Oreille	2/1	16.2	25.5
Cottonwood Lake	Salt	2/1	15.5	22.6
Coulter Creek	Upper Snake		NA	NA
Cozy Cove	Deadwood	2/1	14.9	21.0
Crab Creek	Camas-Beaver	2/1	10.7	15.4
Deadwood Summit	Deadwood	2/1	25.6	30.1
Dollarhide Summit	Big Wood	2/1	19.4	20.9
Elk Butte	Clearwater	2/1	23.9	29.8
Elkhart Park Guard Sta.	Green	1/31	9.3	10.9
Emigrant Summit	Bear	2/1	28.0	26.7
Franklin Basin	Cub	2/1	26.0	28.4
Galena	Big Wood	2/1	12.0	15.8
Galena Summit	Big Wood	2/1	NA	15.8
Garfield Ranger Sta.	Little Wood	2/1	6.4	11.5
Giveout	Montpelier	2/1	9.6	11.8
Goat Creek	Salmon Falls	2/1	21.3	23.5
Graham Guard Sta.	Boise	2/1	12.4	19.5
Grassy Lake	Upper Snake	2/1	21.8	31.8
Gros Ventre Summit	Upper Snake	2/1	NA	10.3
Hemlock Butte	Clearwater	2/1	25.6	29.5
Hilts Creek	Little Lost	2/1	10.4	9.7
Howell Canyon	Marsh Creek	2/1	24.3	26.4
Humboldt Gulch	Coeur d'Alene	2/1	4.5	23.1
Hyndman	Big Wood	2/1	6.3	11.8
Indian Creek	Green	2/1	21.1	20.1
Island Park	Henrys Fork	2/1	8.8	15.8
Jackson Peak	Boise	2/1	17.8	24.6
Kelly Ranger Sta.	Green	2/1	12.9	16.6
Lewis Lake Divide	Upper Snake	2/1	19.9	28.1
Lolo Pass	Lochsa	2/1	15.1	19.2
Lookout	Coeur d'Alene	2/1	NA	23.9
Loomis Park	Green	2/1	9.2	13.1
Lost Lake	Clearwater	2/1	34.4	37.9
Lost-Wood Divide	Big Lost	2/1	11.9	16.0
Magic Mountain	Rock Creek	2/1	23.4	26.5
Meadow Lake	Lemhi	2/1	NA	12.8
Mill Creek Summit	Salmon	2/1	12.0	13.5
Moonshine	Little Lost	2/1	6.1	10.2
Moores Creek Summit	Boise	2/1	23.7	27.6
Moose Creek	North Fork Salmon	2/1	11.5	15.1
Morgan Creek	Salmon	2/1	8.2	12.0
Mosquito Ridge	Coeur d'Alene	2/1	17.5	25.8
Mountain Meadows	Selway	2/1	15.5	19.6
Mud Flat	Owyhee	2/1	NA	15.6
Oxford Spring	Malad		NA	NA
Phillips Bench	Upper Snake	2/1	15.2	21.8
Pole Creek Ranger Sta.	Salmon Falls	2/1	20.4	15.3
Prairie	Boise	2/1	5.4	13.1
Pullman	Palouse		NA	NA
Salt River Summit	Salt	2/1	10.3	16.5
Savage Pass	Lochsa	2/1	13.9	19.4
Schweitzer Basin	Pend Oreille	2/1	26.5	26.9
Secesh Summit	Payette	2/1	19.0	25.9
Shanghai Summit	Clearwater		NA	NA
Sheep Mountain	Willow	2/1	10.6	14.5
Sherwin	St. Maries	1/31	8.0	23.5
Slug Creek Divide	Blackfoot	2/1	14.1	18.5
Snider Basin	Green	2/1	9.3	10.1
Somsen Ranch	Willow Creek	2/1	11.5	15.2
South Lind Experiment Sta.	Walla Walla	2/1	NA	5.3
South Mountain	Jordan-Owyhee	2/1	22.9	16.3
Spring Creek Divide	Green	2/1	16.7	19.6
Squaw Flat	Weiser	2/1	9.8	18.3

^{1/} Data readings as reported by automated Snotel system.

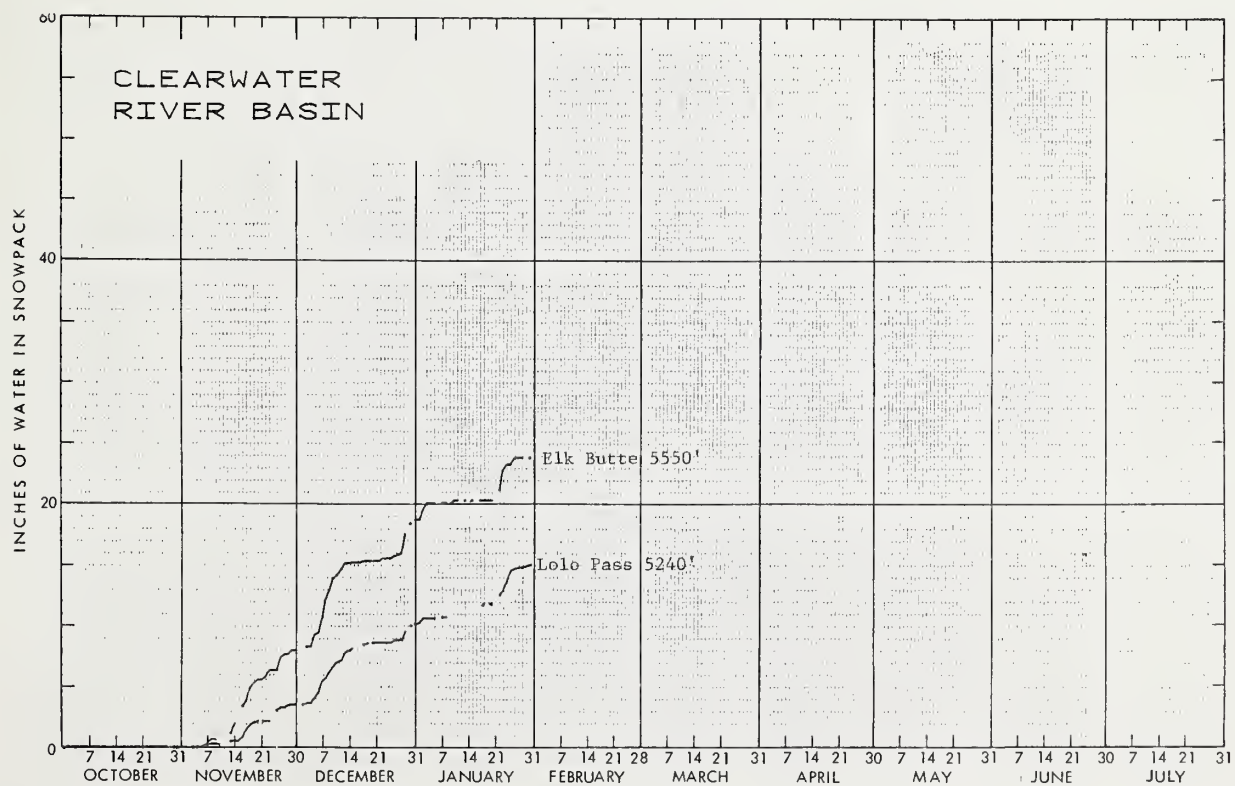
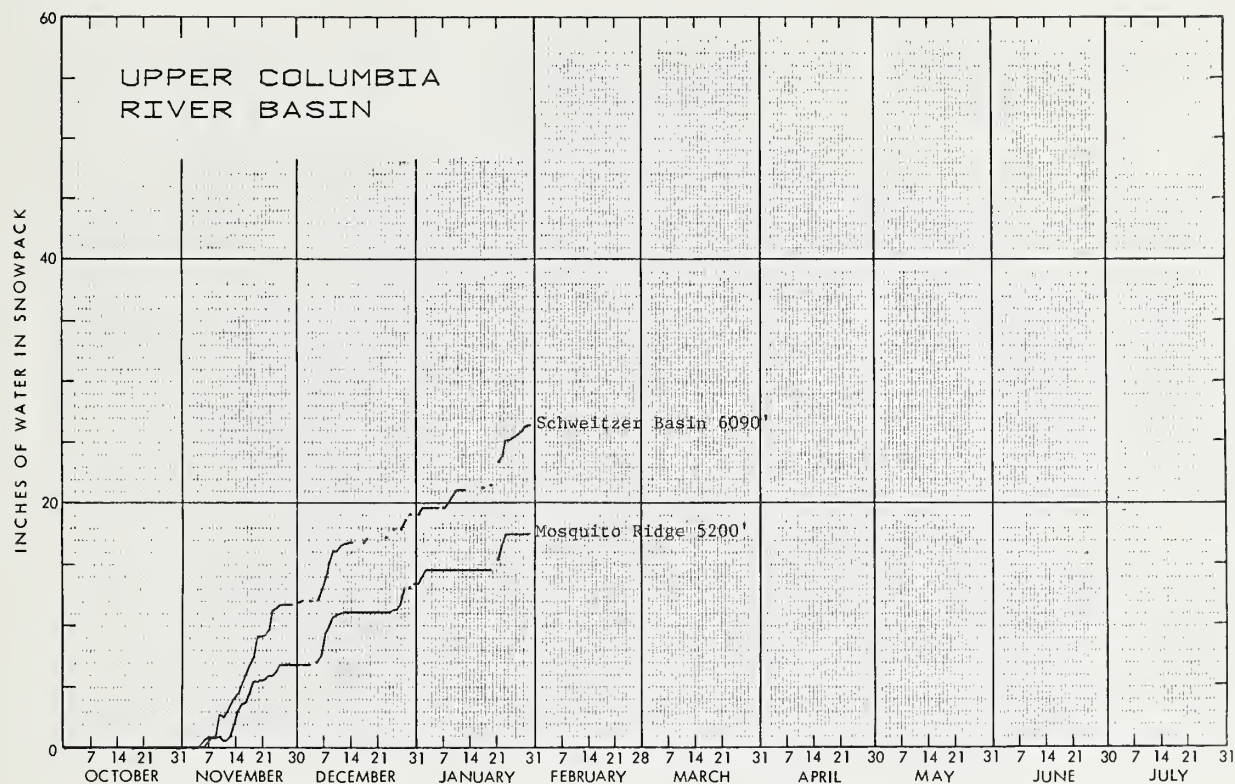
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SNOTEL ^{1/}

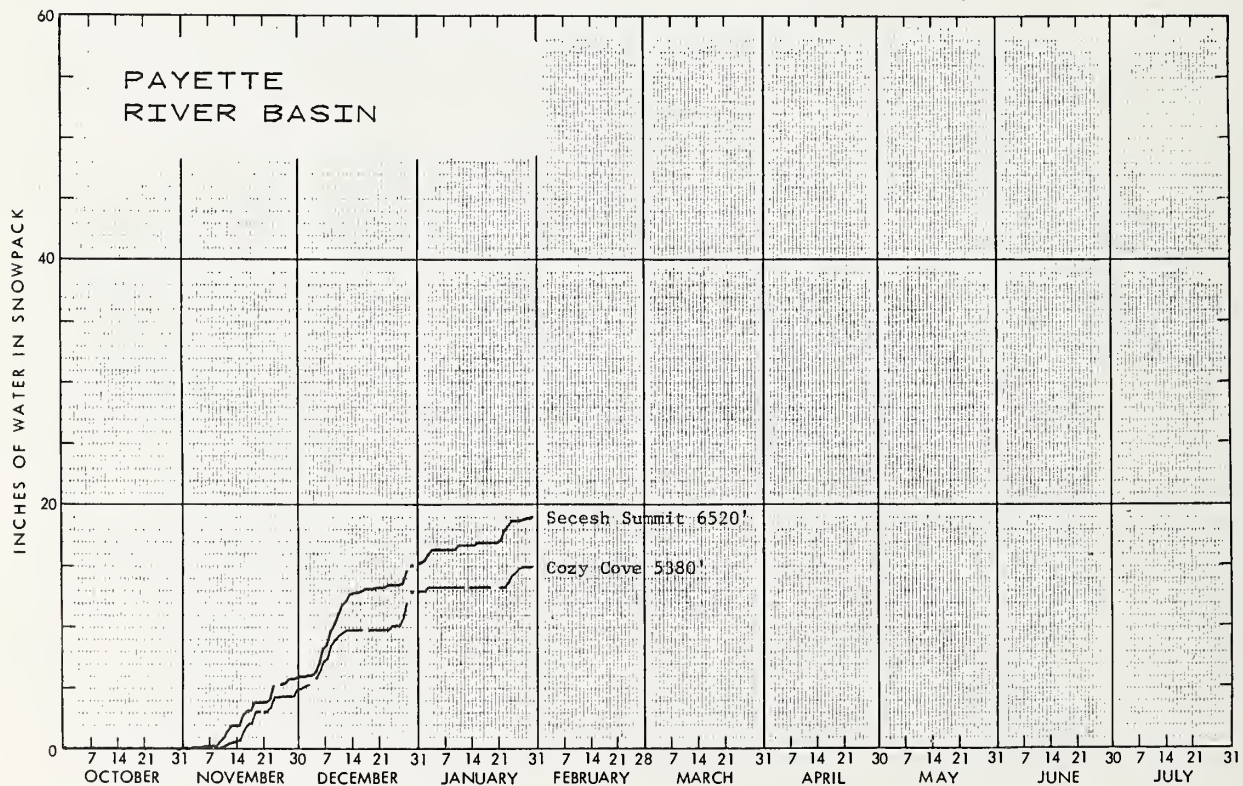
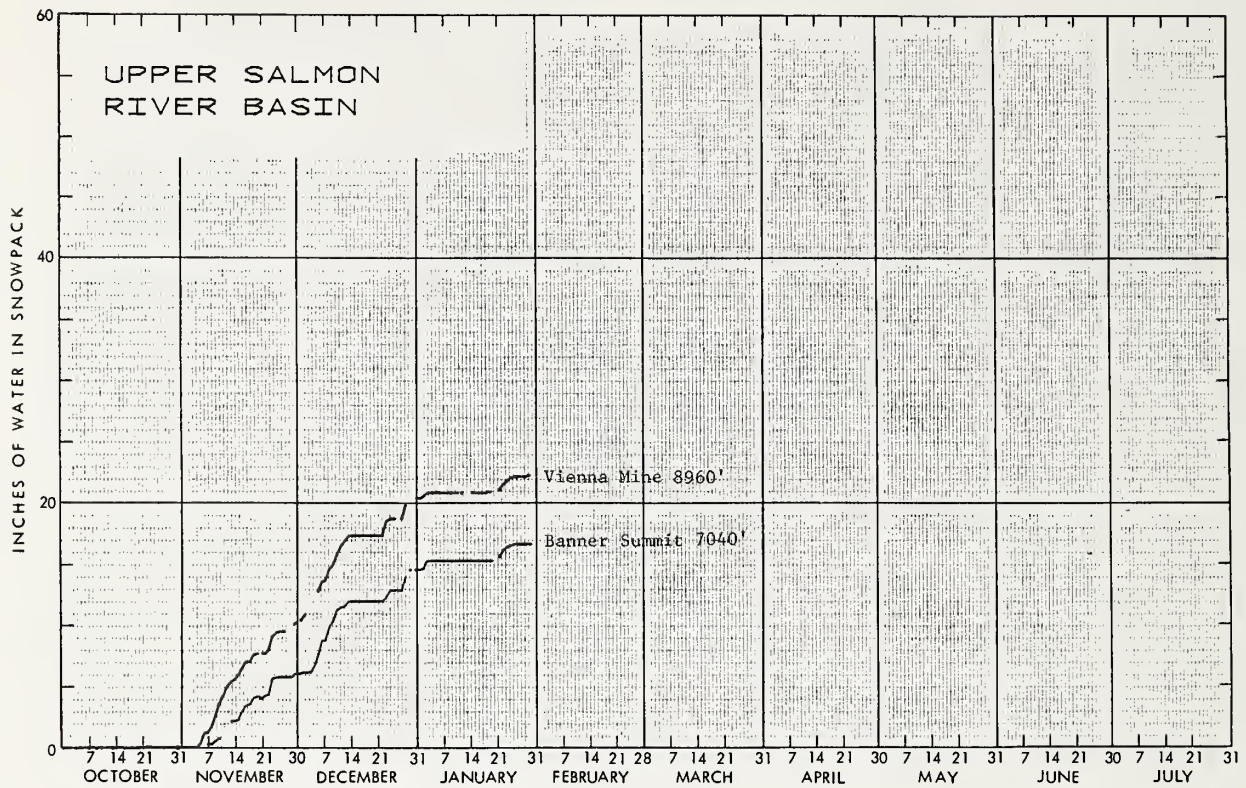
Data Site Name	Drainage	Date	Pillow Snow Water Equivalent (inches)	Precipitation Water Year (Accumulation) (inches)
Stickney Mill	Big Lost	2/1	5.7	6.9
Sunset	Coeur d'Alene		NA	NA
Swede Peak	Little Wood	2/1	10.0	14.0
Togwotee Pass	Upper Snake	2/1	15.5	21.5
Touchet #2	Touchet	1/30	15.0	27.4
Trinity Mountain	Boise	2/1	26.3	31.6
Two Ocean Plateau	Upper Snake	2/1	15.9	18.9
Vienna Mine	Salmon	2/1	22.3	22.5
West Branch	Weiser	2/1	15.7	21.1
White Elephant	Henrys Fork	2/1	15.5	23.2
Wildhorse Divide	Portneuf	2/1	NA	26.1
Willow Creek	Greys	1/2	25.5	30.8

^{1/} Data readings as reported by automated Snotel system.
 NA Data not available.

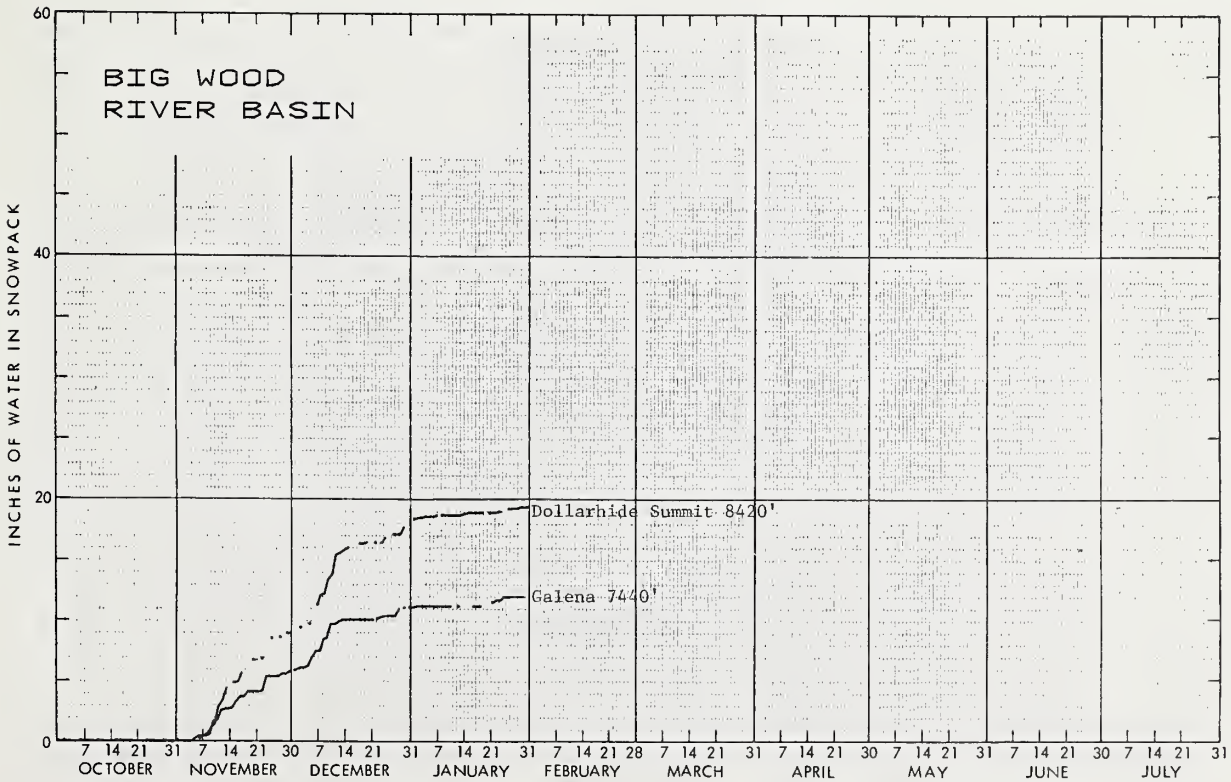
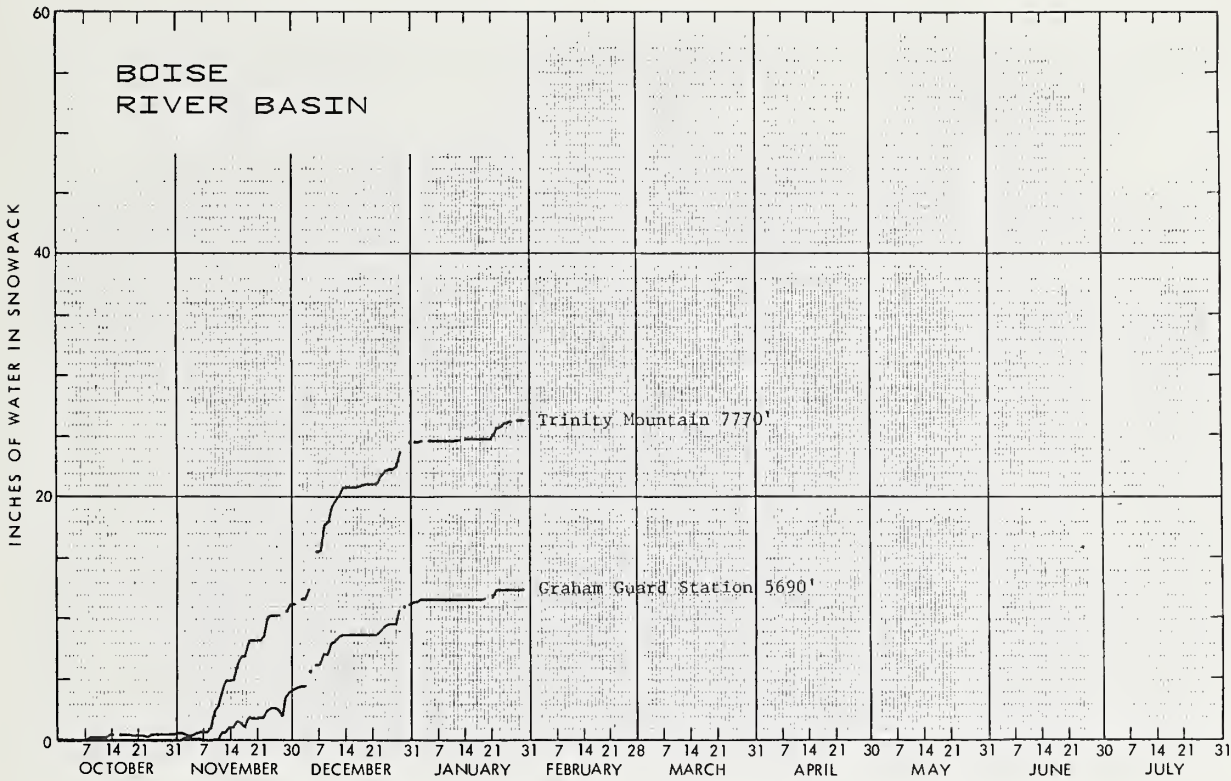
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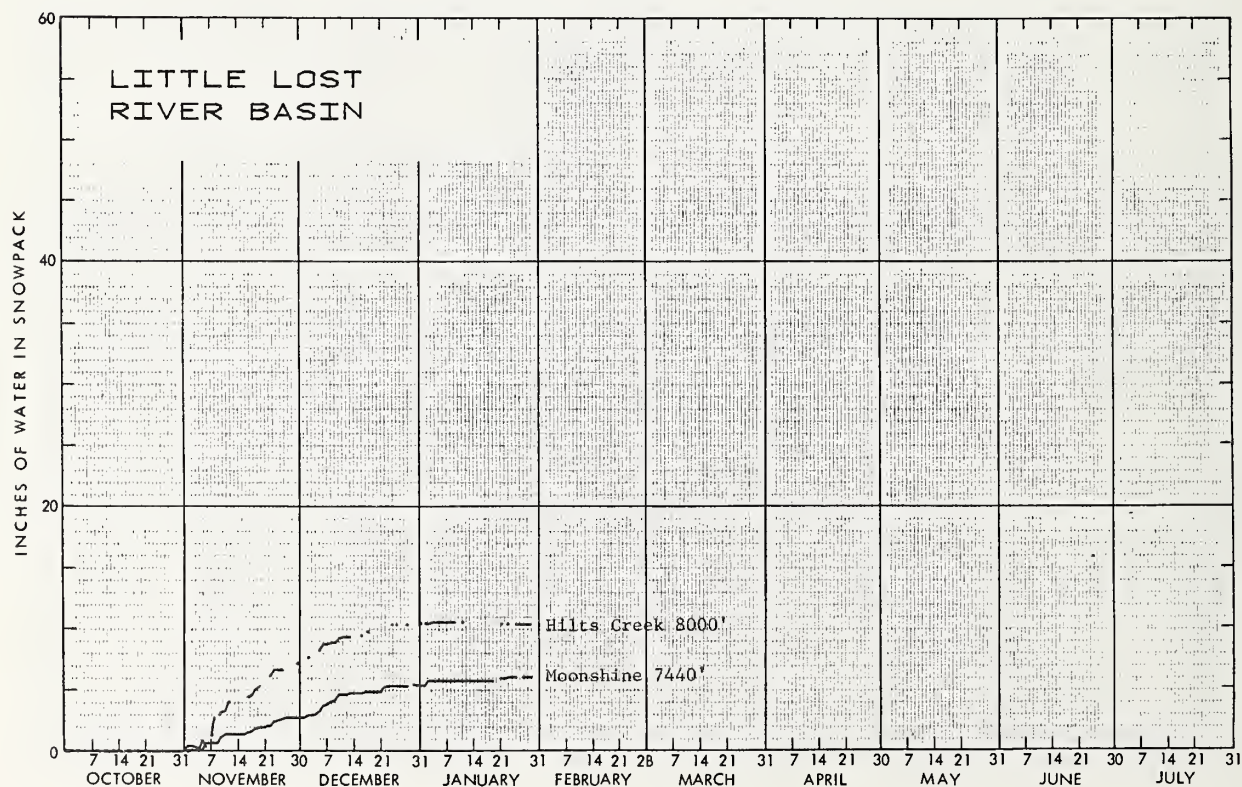
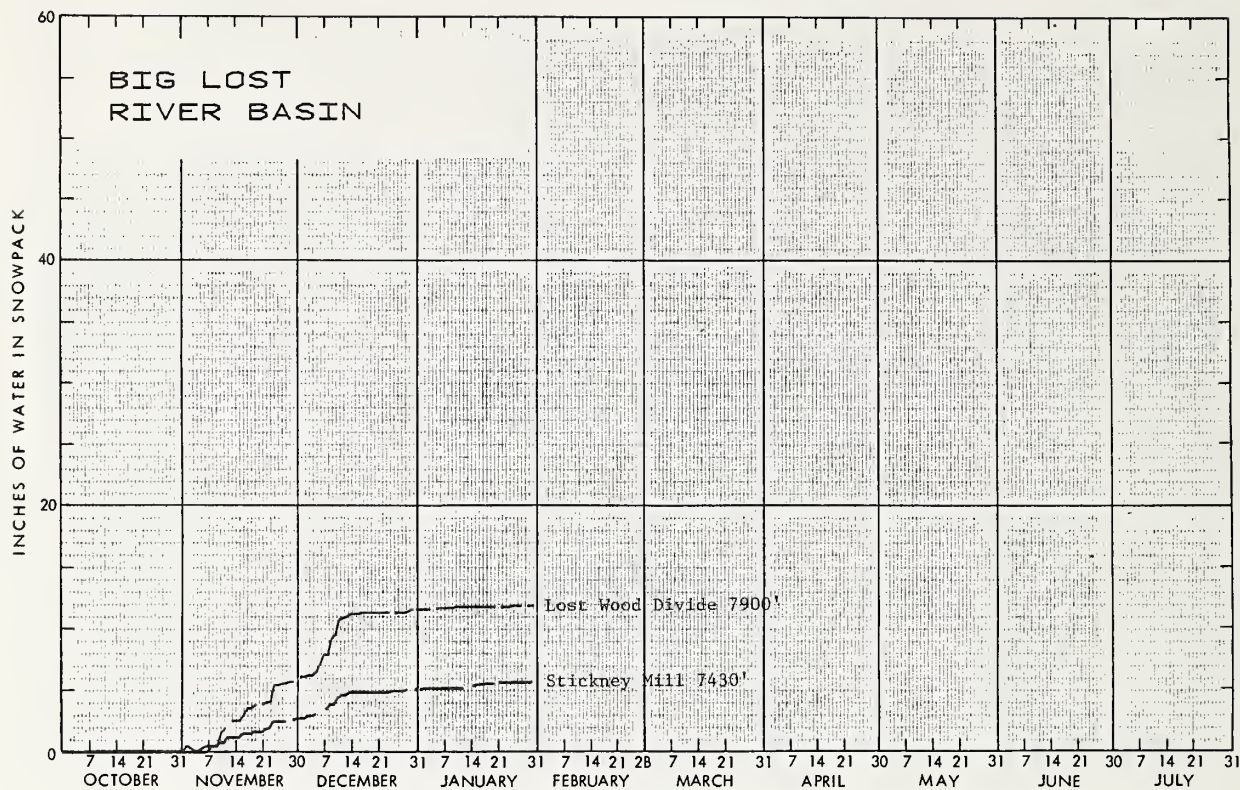
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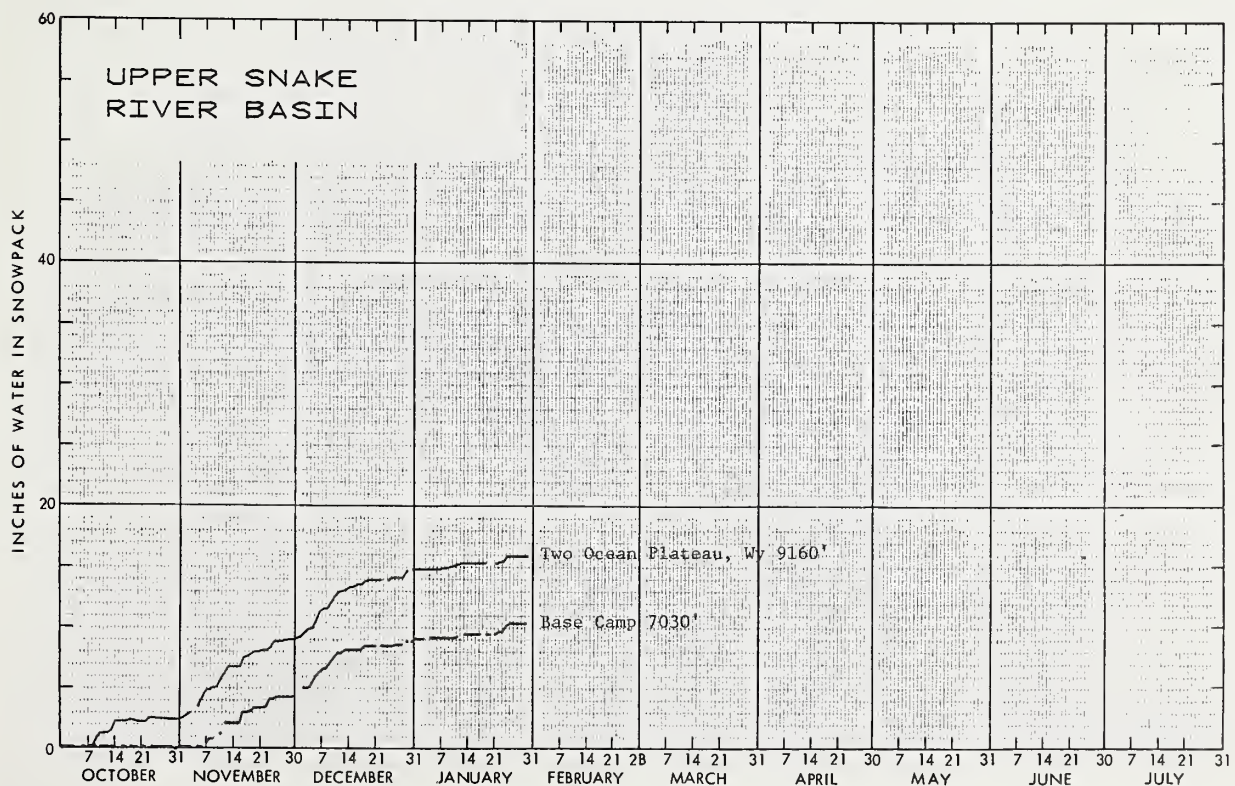
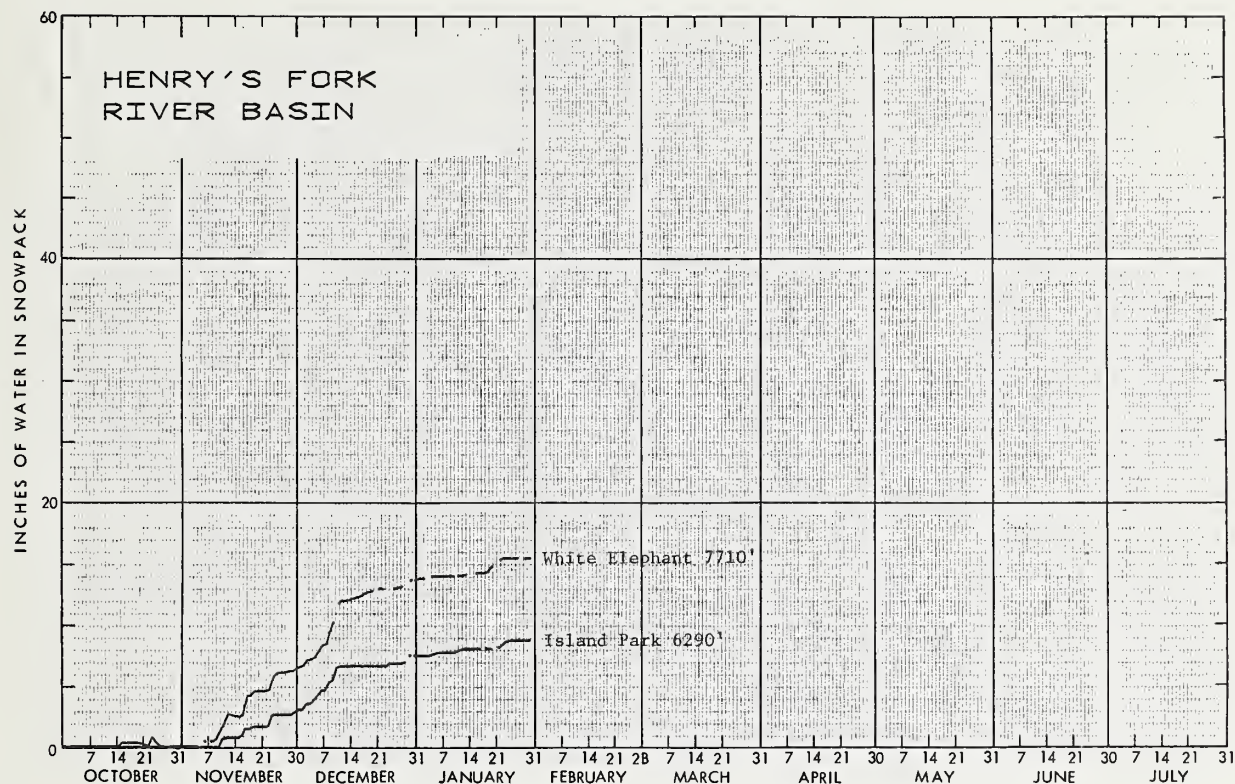
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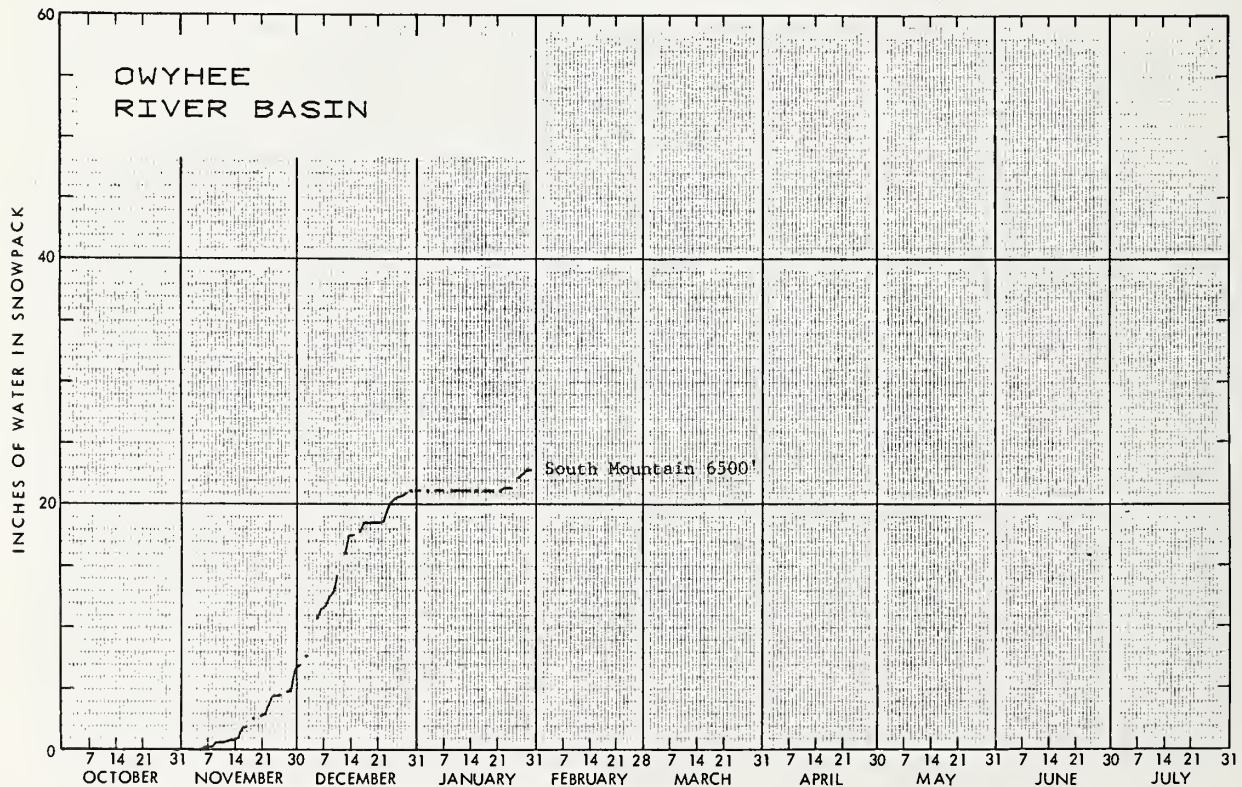
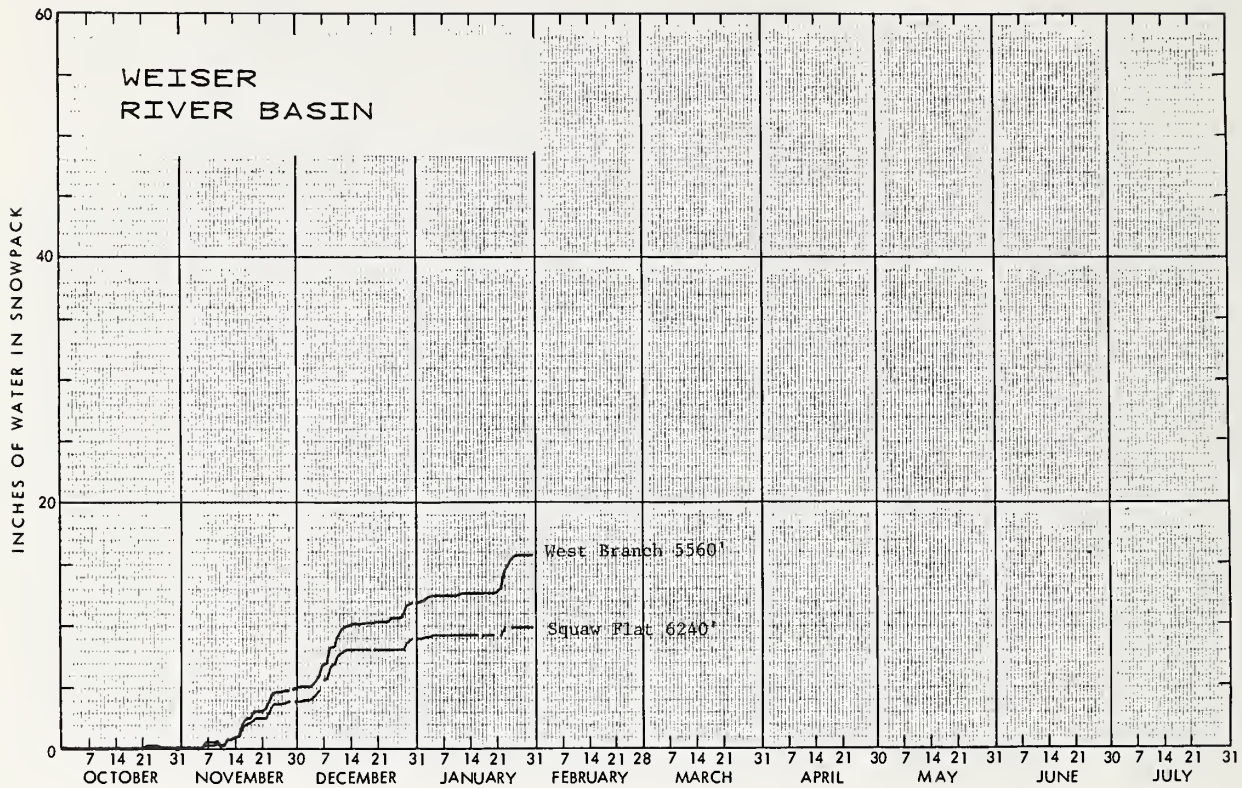


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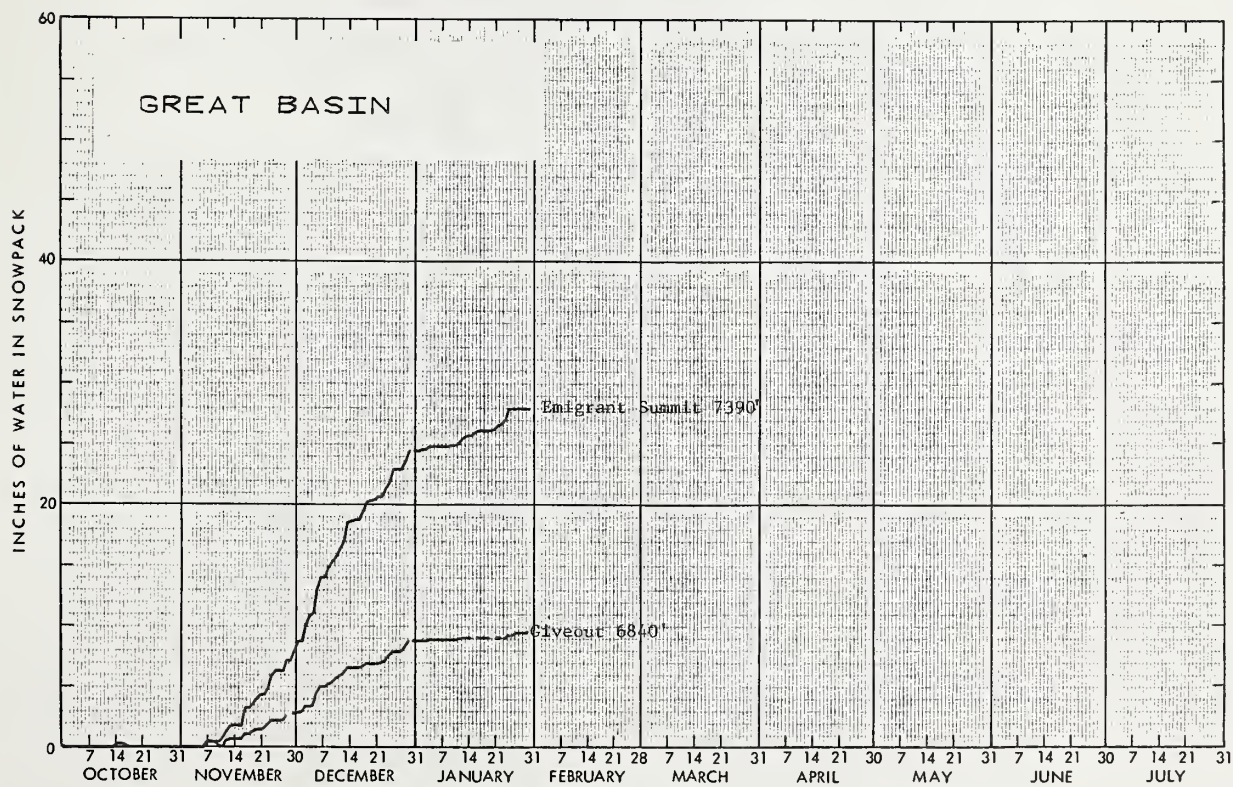
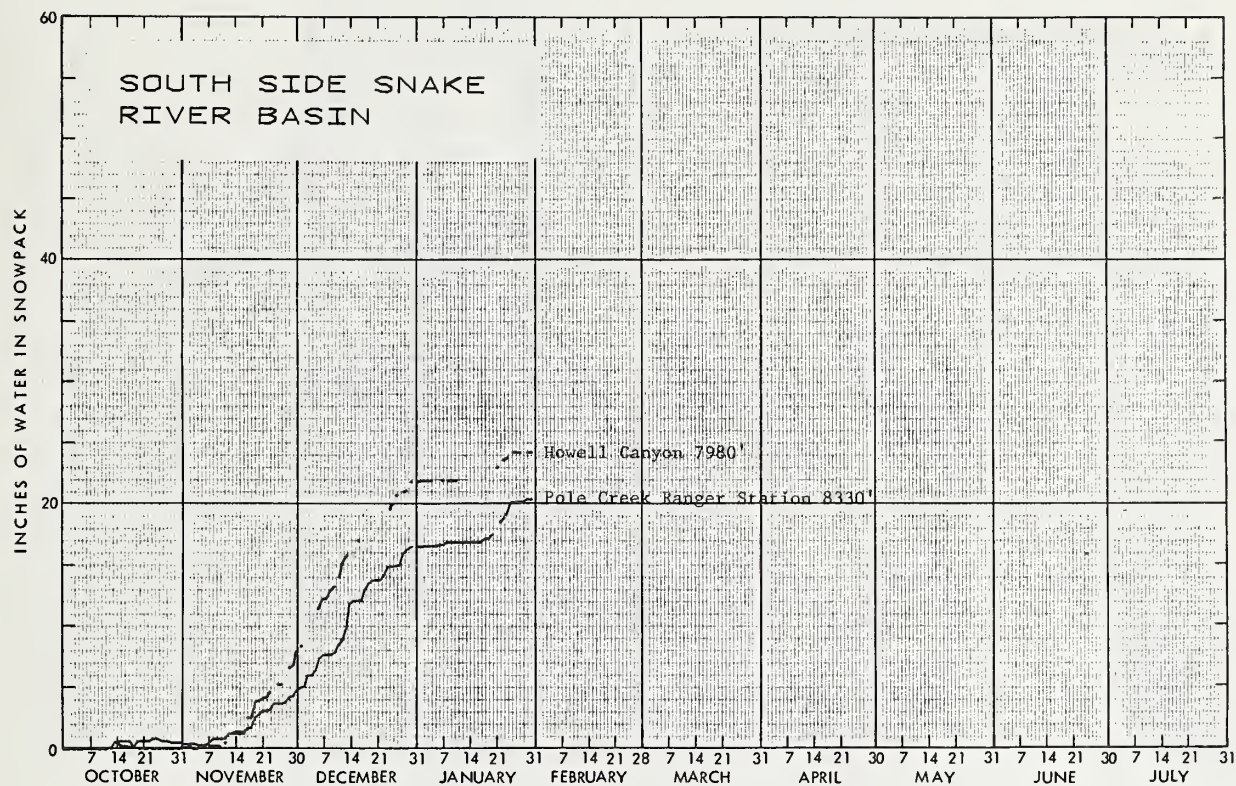


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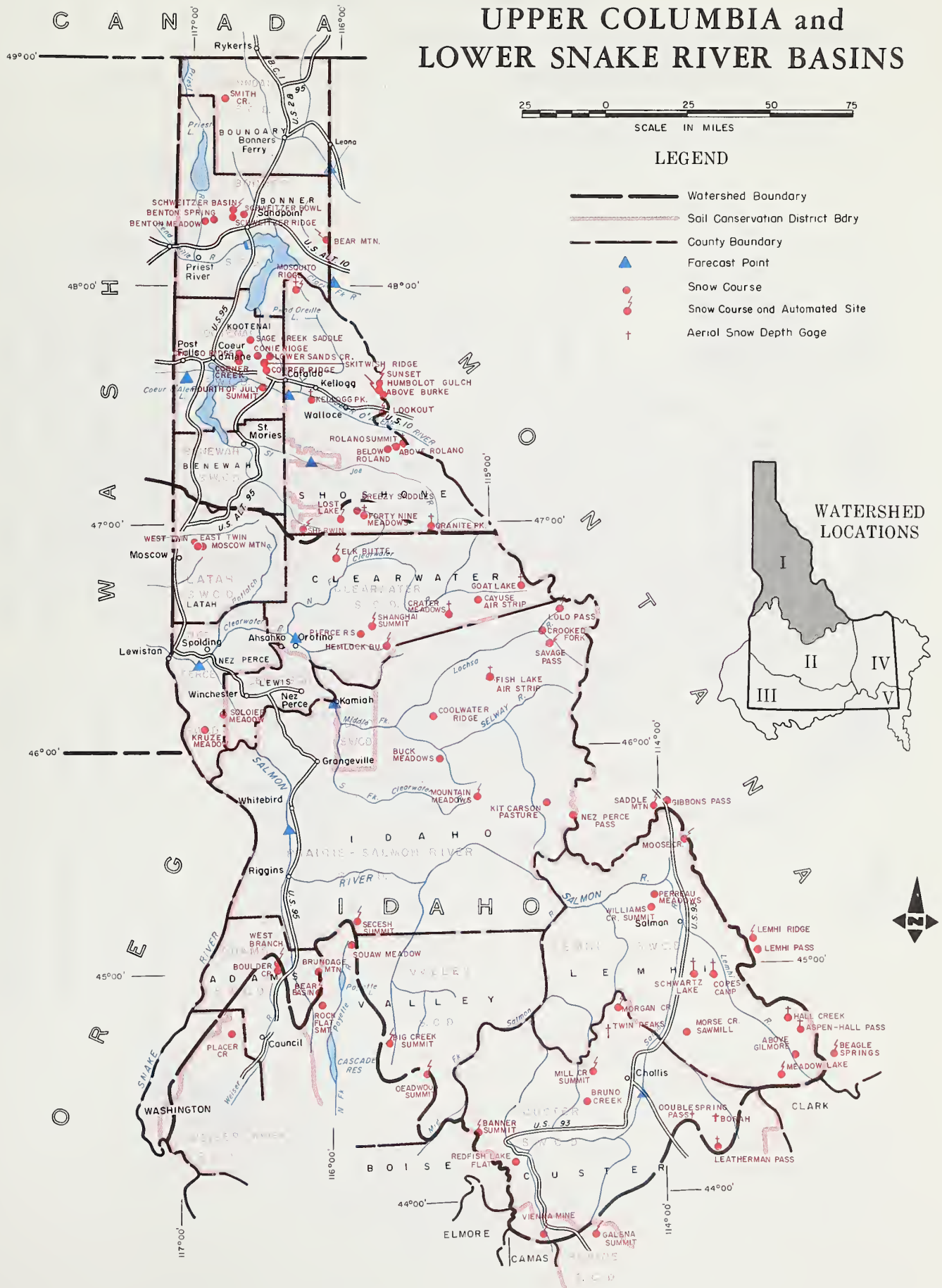




WSR-X13C



UPPER COLUMBIA and LOWER SNAKE RIVER BASINS



INDEX to SNOW COURSES

UPPER COLUMBIA BASIN

LOWER SNAKE BASIN

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
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KOOTENAI RIVER

16A1	I	Smith Creek	29	64N	3W	4800
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PEND OREILLE-PRIEST RIVER

16A8S	I	Bear Mountain	9	57N	3E	5400
16A2	I	Benton Meadow	27	58N	4W	2370
16A3	I	Benton Spring	30	58N	3W	4920
16A10S	I	Schweitzer Basin	18	58N	2W	6090
16A6	I	Schweitzer Bowl	20	58N	2W	4800
16A5	I	Schweitzer Ridge	19	58N	2W	6200

HAYDEN CREEK

16B8	I	Chilco Ridge	15	52N	2W	3650
16B7	I	Conie Ridge	22	52N	2W	3900
16B9	I	Corner Creek	22	52N	2W	3150
16B6	I	Sage Creek Sadler	10	52N	2W	4080

SPOKANE RIVER

15B8	I	Above Burke	11	48N	5E	4100
15B7	I	Above Roland	35	47N	6E	4350
15B6	I	Below Roland	35	47N	6E	3920
16B2	I	Copper Ridge	6	50N	1W	4820
16B3	I	Fourth of July Summit	6	49N	1W	3200
15B13A	I	Granite Peak	4	42N	8E	6000
15B21S	I	Humboldt Gulch	2	48N	5E	4250
16B5A	I	Kellogg Peak	19	48N	3E	5560
15B2S	I	Lookout	4	47N	6E	5140
16B1	I	Lower Sands Creek	32	51N	1W	3120
16A4AS	I	Mosquito Ridge	5	54N	2E	5200
15B5A	I	Roland Summit	26	47N	6E	5120
16C1S	I	Sherwin	28	42N	1E	3200
16B11	I	Skitwish Ridge	6	50N	1W	4850
15B9AS	I	Sunset	33	49N	5E	5540

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
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PALOUSE RIVER

16C3	I	East Twin	13	40N	5W	4130
16C2	I	Moscow Mountain	18	40N	4W	4410
16C4	I	West Twin	14	40N	5W	4220

CLEARWATER RIVER

15B20	I	Breezy Saddle	1	43N	4E	5010
15D5	I	Buck Meadows	27	31N	8E	5650
15C3	I	Cayuse Airstrip	4	38N	11E	3500
15C7	I	Coolwater Mountain	31	33N	8E	6040
15C9A	I	Crater Meadows	11	37N	9E	5960
14C11	I	Crooked Fork	27	37N	14E	3610
16C15S	I	Elk Butte	6	40N	3E	5550
15C2A	I	Fish Lake Airstrip	34	35N	11E	5650
15B3A	I	Forty-nine Meadows	6	43N	5E	4830
14C9A	I	Goat Lake	3	38N	13E	6500
15C6SR	I	Hemlock Butte	7	36N	7E	5810
15C10S	M	Hoodoo Basin	17	14N	27W	6000
15C1	M	Hoodoo Creek	16	14N	27W	5900
14D3	I	Kit Carson Pasture	4	27N	15E	4950
16C17	I	Kruze Meadows	11	32N	4W	4780
14C5S	I	Lolo Pass	16	38N	15E	5240
15B14S	I	Lost Lake	9	43N	4E	6110
15D6S	I	Mountain Meadows	9	27N	10E	6360
14D1	M	Nez Perce Pass	25	1S	24W	6570
15C5	I	Pierce Ranger Station	2	36N	5E	3080
14C4S	I	Savage Pass	18	36N	15E	6170
15C4S	I	Shanghai Summit	7	37N	6E	4600
16C18	I	Soldier Meadows	33	33N	3W	4650

SALMON RIVER

13E19	I	Above Gilmore	13	13N	26E	8240
13E21A	I	Aspen-Hall Pass	6	16N	28E	8200
16E11S	I	Bear Basin	30	19N	3E	5350
15E2S	I	Big Creek Summit	24	15N	5E	6580
13E8A	I	Borah	21	10N	23E	8250
16D6	I	Brundage Mountain	6	19N	3E	7560
14E08	I	Bruno Creek	25	12N	16E	7920
13E17	I	Copes Camp	36	18N	22E	7520
13E25A	I	Double Springs Pass	3	10N	22E	8400
13D2	M	Gibbons Pass	4	2S	19W	7100
13E20	I	Hall Creek	1	16N	27E	7560
13E24A	I	Leatherman Pass	20	9N	23E	9860
13E1	M	Lemhi Pass	9	10S	15W	7480
13E23S	M	Lemhi Ridge	4	10S	15W	8100
13E18S	I	Meadow Lake	26	13N	26E	9150
14E1S	I	Mill Creek Summit	8	13N	17E	8800
13D16S	I	Moose Creek	14	27N	21E	6200
14E4S	I	Morgan Creek	31	18N	19E	7600
13E26	I	Morse Creek Sawmill	8	15N	23E	7120
14D5	I	Perreau Meadows	23	21N	20E	8500
14E7	I	Redfish Lake Flat	35	10N	13E	6560
13E16	I	Schwartz Lake	34	18N	22E	8540
14E3A	I	Twin Peaks	28	15N	17E	9190
14F4S	I	Vienna Mine	1	5N	13E	8960
14D4	I	Williams Creek Summit	34	21N	20E	7990

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

MIDDLE SNAKE RIVER BASIN NORTHSIDE



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- ▲ Forecast Point
- Snow Course
- Snow Course and Automated Site
- † Aerial Snow Depth Gage

INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN NORTHSIDE

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
LITTLE LOST RIVER						
13E5	I	Fairview Guard Station	27	12N	26E	6750
13E27S	I	Hilts Creek	15	8N	25E	8000
13E3	I	Lost-Garfield	3	11N	26E	6600
13E6S	I	Moonshine	31	13N	26E	7440
13E4	I	Sawmill Canyon	17	12N	26E	7000
13E7	I	Wet Creek Summit	15	8N	25E	7680

BIG LOST RIVER						
13F3S	I	Bear Canyon	22	5N	21E	7900
13F2	I	Copper Basin	26	6N	21E	7640
13F20	I	Dry Fork	23	3N	23E	7220
13F8	I	Fishpole Lake	28	4N	22E	9300
13F11	I	Iron Bog	23	4N	22E	7650
13F12	I	Leadbelt	34	4N	23E	6700
14F3S	I	Lost Wood Divide	25	6N	18E	7900
14F2S	I	Stickney Mill	9	6N	19E	7430

BIG WOOD RIVER						
15F9	I	Camas Creeks Divide	11	2S	9E	5710
15F15	I	Chimney Creek	9	1N	12E	6400
14F8S	I	Dollarhide Summit	9	3N	15E	8420
14F1	I	Galena	4	6N	15E	7440
14F17S	I	Galena Snotel	4	6N	15E	7470
14F12S	I	Galena Summit	7	6N	15E	8780
14F5	I	Graham Ranch	10	5N	17E	6270
14F16S	I	Hyndman Creek	2	4N	19E	7440
14F7	I	Mascot Mine	8	4N	20E	7780
14F9	I	Mount Baldy	23	4N	17E	8920
14F11	I	Soldier Ranger Station	29	2N	14E	5740

LITTLE WOOD RIVER						
13F4S	I	Garfield Ranger Station	11	3N	21E	6560
13F5	I	Muldoon	26	3N	21E	6320
13F9S	I	Swede Peak	4	3N	21E	7640

FISH CREEK						
13F10	I	Iron Mine Creek	33	3N	23E	6300
13F6	I	Telfer Ranch	7	2N	23E	5840

BOISE RIVER						
15F17	I	Atlanta Townsite	3	5N	11E	5370
15F4S	I	Atlanta Summit	23	5N	10E	7580
15F2	I	Bad Bear	35	7N	6E	4940
16F4	I	Bogus Basin Road	32	5N	3E	5540

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
BOISE RIVER (cont.)						
14F10	I	Couch Summit	9	2N	14E	6840
16F1	I	Deadman Gulch	29	7N	4E	5600
15F14S	I	Graham Guard Station	9	7N	10E	5690
15F16	I	Idaho City Townsite	26	6N	5E	4000
15E9S	I	Jackson Peak	7	8N	9E	7070
15F1S	I	Moore's Creek Summit	19	7N	7E	6100
15F6S	I	Prairie	13	2N	7E	4800
15F3	I	Road Creek	5	5N	8E	5380
15F5S	I	Trinity Mountain	6	3N	9E	7770

CANYON CREEK						
15F7S	I	Bennett Mountain	7	2S	9E	6560
15F12	I	Little Camas Flat	21	1S	9E	4940

PAYETTE RIVER						
15E11S	I	Banner Summit	11	11N	10E	7040
16F2	I	Bogus Basin	16	5N	3E	6340
15E8S	I	Cozy Cove	17	11N	7E	5380
15E3	I	Crawford Ranger Station	21	14N	4E	4860
15E10	I	Deadwood Airstrip	8	11N	7E	5360
15E4S	I	Deadwood Summit	13	14N	7E	6860
15E1	I	Lake Fork	3	18N	4E	5290
16E1	I	Rock Flat Summit	1	18N	2E	5310
15D1S	I	Secesh Summit	4	21N	4E	6520
15D2	I	Squaw Meadow	17	21N	4E	5900
16E3	I	Tripod Summit	17	11N	3E	5260

WEISER RIVER						
16D1	I	Boulder Creek	16	20N	1W	5440
16E2	I	Placer Creek	15	17N	3W	5860
16E5S	I	Squaw Flat	32	17N	2E	6240
16D8S	I	West Branch	15	20N	1W	5560

MANN CREEK						
6E10S	I	Bear Saddle	29	15N	5W	6180
16E9	I	Mann Creek	20	15N	5W	6080
17E1	I	Robinson Creek Ridge	2	14N	6W	6220
16E8	I	Sturgill Ridge	28	15N	5W	6680
17E2	I	Thorson Cabin	12	14N	6W	5320

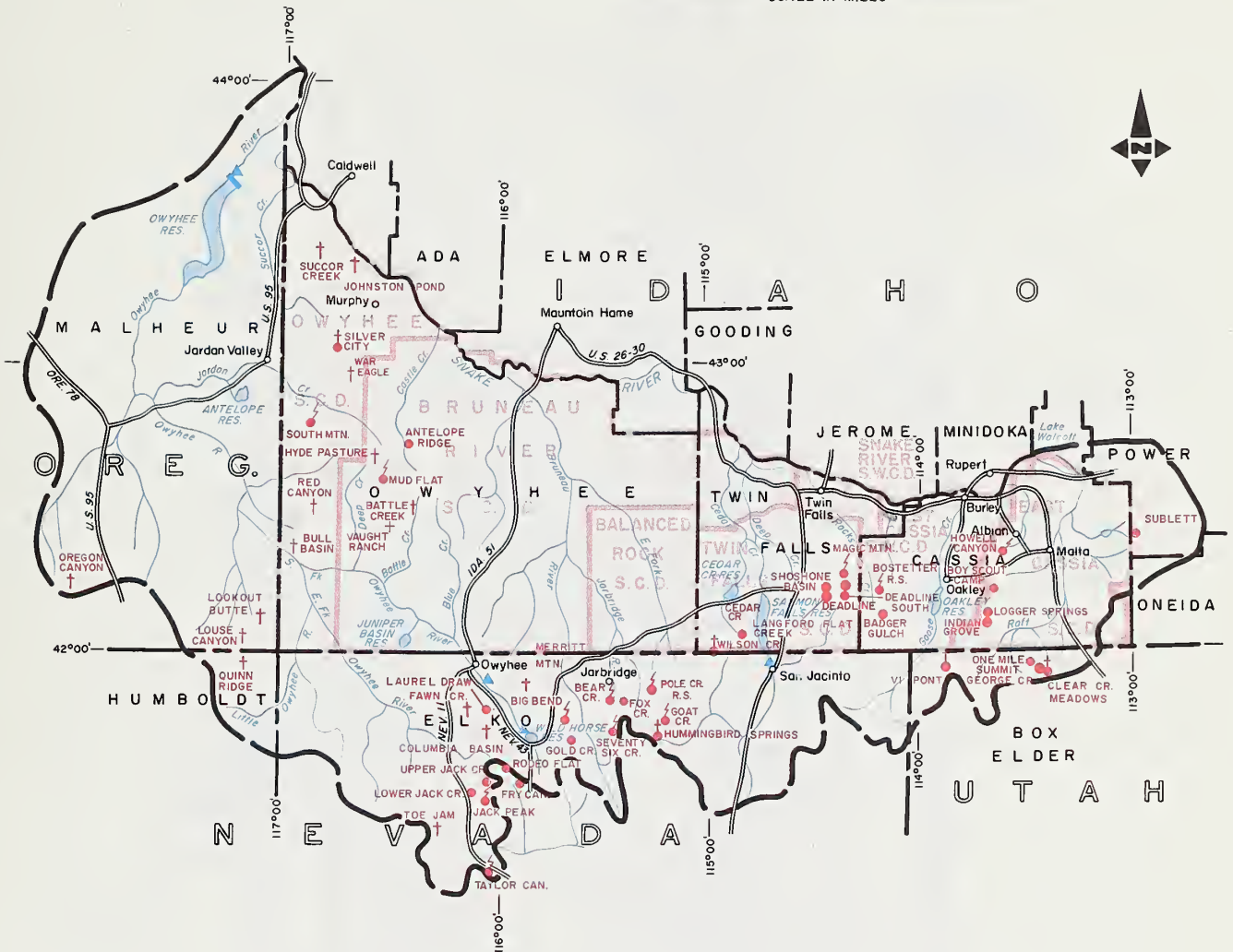
LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

MIDDLE SNAKE RIVER BASIN SOUTHSIDE

25 0 25 50 75
SCALE IN MILES



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- ▲ Forecast Point
- Snow Course
- Snow Course and Automated Site
- † Aerial Snow Depth Gage

WATERSHED LOCATIONS



INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN SOUTHSIDE

No.	State	Name	Sec.	Twp.	Rge.	Elevation
			Lat.	And	Long.	
RAFT RIVER						
13G2	I	Boy Scout Camp	8	14S	24E	7740
13H2	U	Clear Creek Meadows	26	14N	14W	9420
13H5	U	George Creek	26	14N	14W	8840
13G1S	I	Howell Canyon	2	13S	24E	7980
13G4	I	Indian Grove	14	15S	23E	7560
13G3	I	Logger Springs	2	15S	23E	8120
13H1	U	One Mile Summit	17	14N	14W	7330
12G8	I	Sublett	17	12S	30E	5950
GOOSE - TRAPPER CREEK						
14G3	I	Badger Gulch	24	15S	19E	6660
14G1S	I	Bostetter Ranger Station	35	14S	19E	7500
13H3A	U	Vi Pont	17	14N	17W	7670
SALMON FALLS CREEK						
14G5	I	Cedar Creek	26	15S	13E	6800
14G4	I	Deadline	25	14S	18E	6900
14G1O	I	Deadline South	25	14S	18E	7450
15H13S	N	Goat Creek	31	46N	60E	8880
14G08	I	Langford Flat Creek	8	15S	18E	5980
14G2S	I	Magic Mountain	25	14S	18E	6880
14G6	I	Shoshone Basin	24	14S	17E	5810
15G2	I	Wilson Creek	24	16S	12E	7500
BRUNEAU RIVER						
15H1S	N	Bear Creek	31	46N	58E	8040
15H2	N	Fox Creek	33	46N	58E	6750
15H1S	N	Hummingbird Springs	12	45N	59E	8870
15H14S	N	Pole Creek Ranger Station	13	46N	59E	8330
15H3S	N	Seventy-six Creek	6	44N	58E	7100
OWYHEE RIVER						
16G6	I	Antelope Ridge	3	9S	1W	6180
16G9A	I	Battle Creek	10	11S	1E	5720
15H4S	N	Big Bend	30	45N	56E	6700
16G10A	I	Bull Basin	29	12S	5W	5460
16H6A	N	Columbia Basin	31	44N	53E	6650
16H8A	N	Fawn Creek	2	45N	52E	7000
15H7	N	Fry Canyon	31	43N	54E	6700
15H5	N	Gold Creek	32	45N	56E	6600
16G5A	I	Hyde Pasture	31	8S	2W	5760
16H4S	N	Jacks Peak	21	42N	53E	8420
16F5A	I	Johnston Pond	5	4S	4W	6700
16H5S	N	Laurel Draw	20	45N	53E	6700
17G6A	O	Lookout Butte	2	40S	47E	5650
17G4A	O	Louse Canyon	27	40S	44E	6440
16H1M	N	Lower Jack Creek	18	42N	53E	6800
15H20A	N	Merritt Mountain	10	46N	54E	7000
16G7S	I	Mud Flat	34	9S	2W	5730
17G5A	O	Oregon Canyon	8	40S	40E	6950
17H6A	N	Quinn Ridge	9	47N	41E	6300
16G11A	I	Red Canyon	32	11S	4W	6650
15H6M	N	Rodeo Flat	36	43N	53E	6800
16F3	I	Silver City	7	5S	3W	6400
16G1S	I	South Mountain	35	7S	5W	6500
16F6A	I	Succor Creek	25	3S	5W	6100
15H9S	N	Taylor Canyon	35	39N	53E	6200
16H7A	N	Toe Jam	29	40N	50E	7700
16H2	N	Upper Jack Creek	9	42N	53E	7250
16G12A	I	Vaught Ranch	23	11S	1W	5830
16G13A	I	War Eagle	16	5S	3W	7720

LEGEND

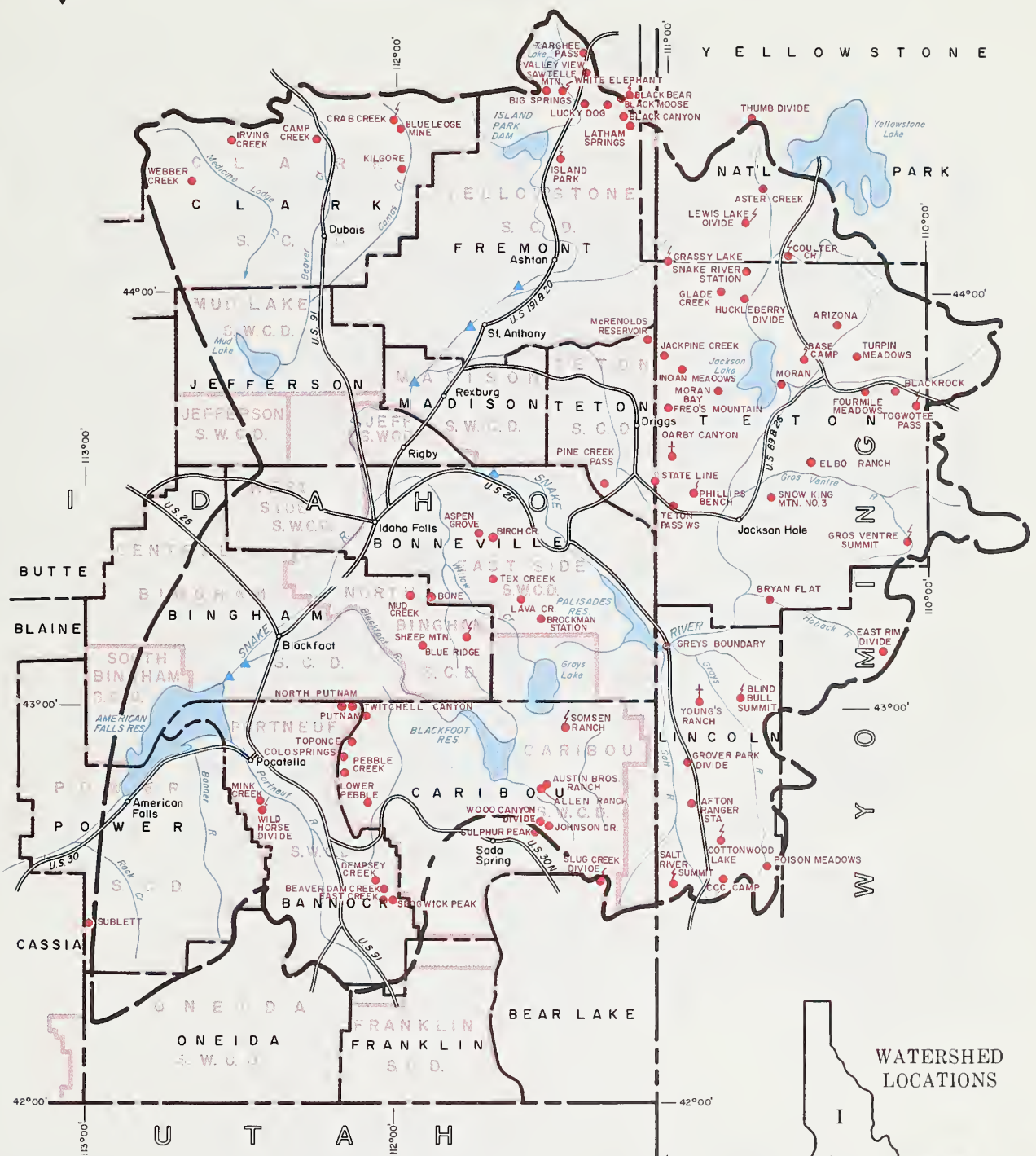
Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

UPPER SNAKE RIVER BASIN



25 0 25 50
SCALE IN MILES



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- - - County Boundary
- ▲ Forecast Point
- Snow Course
- + Snow Course and Automated Site
- † Aerial Snow Depth Gage



INDEX to SNOW COURSES

UPPER SNAKE RIVER BASIN

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev	No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
SNAKE RIVER-WYOMING							CAMAS-BEAVER CREEK						
10G4	Wy	Afton Ranger Station	30	32N	118W	6240	11E11	I	Blue Ledge Mine	21	13N	38E	6900
10F1	Wy	Arizona	3	46N	115W	6820	12E3	I	Camp Creek	21	13N	36E	6580
10E8	Wy	Aster Creek	44°17'		110°38'	7750	11E37S	I	Crab Creek	21	13N	38E	6860
10F2S	Wy	Base Camp	20	46N	113W	7030	11E12	I	Kilgore	6	12N	39E	6320
10F7S	Wy	Blackrock	4	44N	111W	8900	MEDICINE LODGE CREEK						
10G2S	Wy	Blind Bull	6	34N	115W	8650	12E4	I	Irving Creek	8	13N	33E	7280
10F14	Wy	Bryan Flat	9	38N	115W	6420	12E5	I	Webber Creek	23	12N	32E	6700
10G7	Wy	CCC Camp	9	29N	118W	7000	WILLOW CREEK						
10G5S	Wy	Cottonwood Lake	25	31N	118W	7600	11F10	I	Aspen Grove	36	2N	41E	6500
10E10S	Wy	Coulter Creek	44°10'		110°33'	7020	11F3	I	Birch Creek	36	2N	41E	6800
10F17	Wy	East Rim Divide	32	37N	111W	7930	11F8	I	Bone	29	1S	40E	6200
10F28	Wy	Elbo Ranch	25	43N	115W	7100	11F16	I	Brockman Station	19	2S	43E	6430
10F6	Wy	Four Mile Meadows	35	45N	112W	7860	11F15	I	Lava Creek	27	1S	42E	7350
10E13	Wy	Glade Creek	12	48N	116W	7040	11F14	I	Mud Creek	4	2S	39E	7100
10F18	Wy	Greys Boundary	33	37N	118W	5720	11F11S	I	Sheep Mountain	30	2S	41E	6570
10F19S	Wy	Gros Ventre Summit	36	40N	111W	8750	11F5	I	Tex Creek	36	1N	41E	6650
10G3	Wy	Grover Park Divide	27	33N	118W	7000	BLACKFOOT RIVER						
10E14	Wy	Huckleberry Divide	32	48N	115W	7300	11G35	I	Allen Ranch	28	7S	43E	6470
10E9S	Wy	Lewis Lake Divide	44°12'		110°40'	7850	11G3	I	Austin Brothers Ranch	28	7S	43E	6400
10F4	Wy	Moran	19	45N	114W	6750	11F17	I	Blue Ridge	35	2S	39E	6780
10F3	Wy	Moran Bay	14	45N	116W	6810	11G36	I	Johnson Creek	4	9S	43E	6730
10G6	Wy	Poison Meadows	29	30N	116W	8500	11G5S	I	Slug Creek Divide	15	10S	44E	7225
10G8S	Wy	Salt River Summit	32	29N	118W	7700	11G1S	I	Somsen Ranch	25	5S	43E	6800
10E12	Wy	Sake River Station	9	48N	115W	6920	11G31	I	Sulphur Peak	8	9S	43E	7070
10F20	Wy	Snow King Mountain #3	4	40N	116W	7660	11G37	I	Wood Canyon Divide	5	9S	43E	7450
10E7	Wy	Thumb Divide	44°22'		110°34'	7980	FORT PORTNEUF RIVER						
10F9S	Wy	Togwotee Pass	28	44N	110W	9580	12G21	I	Beaverdam Creek	22	10S	38E	6120
10F5	Wy	Turpin Meadows	14	45N	112W	6900	12G16	I	Cold Springs	15	7S	37E	7000
10G1A	Wy	Young's Ranch	26	34N	116W	6650	12G5	I	Dempsey Creek	18	10S	38E	6100
HENRY'S FORK RIVER							11G34	I	East Creek	26	10S	38E	7000
11E9	I	Big Springs	4	13N	44E	6400	12G6	I	Lower Pebble	7	8S	38E	5780
11E35S	M	Black Bear	27	15S	5E	7950	12G1	I	Mink Creek	33	7S	34E	6410
11E18	I	Black Canyon	11	13N	45E	7960	12G20	I	North Putnam	29	5S	37E	7240
11E19	I	Black Moose	33	14N	45E	8160	12G2	I	Pebble Creek	35	7S	37E	6400
110E15S	Wy	Grassy Lake	18	48N	116W	7265	12G14	I	Putnam	2	6S	37E	7220
11E10S	I	Island Park	28	13N	43E	6290	11G30	I	Sedgwick Peak	30	10S	39E	7850
11E16	I	Latham Springs	9	13N	45E	7630	12G15	I	Toponce	23	6S	37E	6160
11E14	I	Lucky Dog	2	13N	44E	6860	12G19	I	Twitchell Canyon	21	5S	37E	6300
11E32	I	Sawtell Mountain	7	14N	43E	8720	12G17S	I	Wildhorse Divide	4	8S	34E	6490
11E34	I	Targhee Pass	32	16N	44E	6980							
11E8	I	Valley View	12	15N	43E	6680							
11E36S	I	White Elephant	17	14N	43E	7710							
TETON RIVER													
10F21A	Wy	Darby Canyon	28	43N	118W	8250							
10F22	Wy	Freds Mountain	12	44N	118W	8000							
10F25	Wy	Indian Meadows	33	46N	117W	8240							
10F26	Wy	Jackpine Creek	15	46N	118W	7350							
11F12	I	McRenolds Reservoir	5	7N	46E	6720							
10F23S	Wy	Phillips Bench	43°31'		110°55'	8200							
11F2	I	Pine Creek Pass	24	3N	44E	6810							
11F1	I	State Line	32	3N	46E	6660							
10F24	Wy	Teton W. S.	43°30'		110°59'	7740							

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

GREAT BASIN



INDEX to SNOW COURSES

GREAT BASIN

No.	State	Name	Sec.	Twp.	Rge.	Elevation
			Lat.	or And	Long.	
BEAR RIVER						
10G11	Wy	Big Park	7	27N	117W	8620
11H13S	U	Dry Bread Pond	19	8N	4E	8350
11G7	I	Emigration Canyon	24	12S	42E	6500
11H7P	U	Garden City Summit	35	14N	4E	7600
10J6P	U	Burts-Miller Ranch	19	3N	10E	7900
10J7P	U	Hayden Fork	25	1N	9E	9400
10G12S	Wy	Kelly Ranger Station	1	26N	118W	8200
11H12P	U	Monte Cristo R. S.	4	8N	4E	8960
10G19	Wy	South Thomas Fork	27	27N	119W	7840
10J17P	U	Stillwater Camp	32	2N	10E	8550
10J28P	U	Whitney G. S.	4	1N	9E	9300

MONTPELIER CREEK

11G16	I	Giveout	2	12S	45E	6840
11G33S	I	Giveout Snotel	2	12S	45E	6930
11G20	I	Little Beaver	27	11S	45E	6970
11G27	I	Lower Home Canyon	17	12S	45E	7640
11G18	I	Montpelier Creek	14	12S	45E	6540
11G26	I	Upper Home Canyon	31	11S	45E	8560
11G21	I	Whiskey Flat	26	11S	45E	6960

MINK CREEK

11G11	I	Christensen Ranch	27	13S	41E	5560
11G14A	I	Dry Basin	30	13S	42E	7820
11G6S	I	Emigrant Summit	21	12S	42E	7390
11G15A	I	Horseshoe Basin	31	13S	42E	8000
11G13	I	Liberty Spring	7	13S	42E	8600
11G9	I	Strawberry Creek	9	13S	41E	5820
11G10	I	Strawberry Mink Divide	14	13S	41E	6720

CUB RIVER

11G12	I	Cub River Ranger Station	9	15S	41E	5450
11G8	I	Franklin Basin	1	16S	41E	8040
11G32S	I	Franklin Basin Sno	7	16S	42E	8170
11G4	I	Willow Flat	11	15S	41E	6070
11G28	I	Worm Creek	28	14S	41E	6620

MALAD RIVER

12G13	I	Cliff Canyon	13	12S	35E	7200
12G12	I	Daniels Creek	11	12S	35E	6270
12G4	I	Dry Creek Flat	33	13S	37E	6360
12G11	I	Lower Elkhorn	30	12S	36E	6960
12G3	I	Oxford Mountain	27	13S	37E	6800
12G18S	I	Oxford Spring	27	13S	37E	6740
12G10	I	Upper Elkhorn	25	12S	35E	7140

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage
10J7P	Precipitation gage

GOVERNMENT AGENCIES

States

Idaho Department of Water Resources
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
Forest Service

U. S. Department of Commerce
NOAA, National Weather Service

U. S. Department of Interior
Bureau of Reclamation
Water Resources Division, Geological Survey
Shoshone-Bannock Tribal Council

PUBLIC UTILITIES

Washington Water Power Company
Idaho Power Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

PRIVATE ORGANIZATIONS

FMC Corporation
Cyprus Mining Company

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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DR. ALBERT RANGO - CHIEF
HYDROLOGY LABORATORY
RM. 139 - BLDG. 007
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BELTSVILLE MD 20705